

EUROPEAN POLLEN DATABASE



European Pollen Database
Meeting and
training workshops
1-3.06.2016

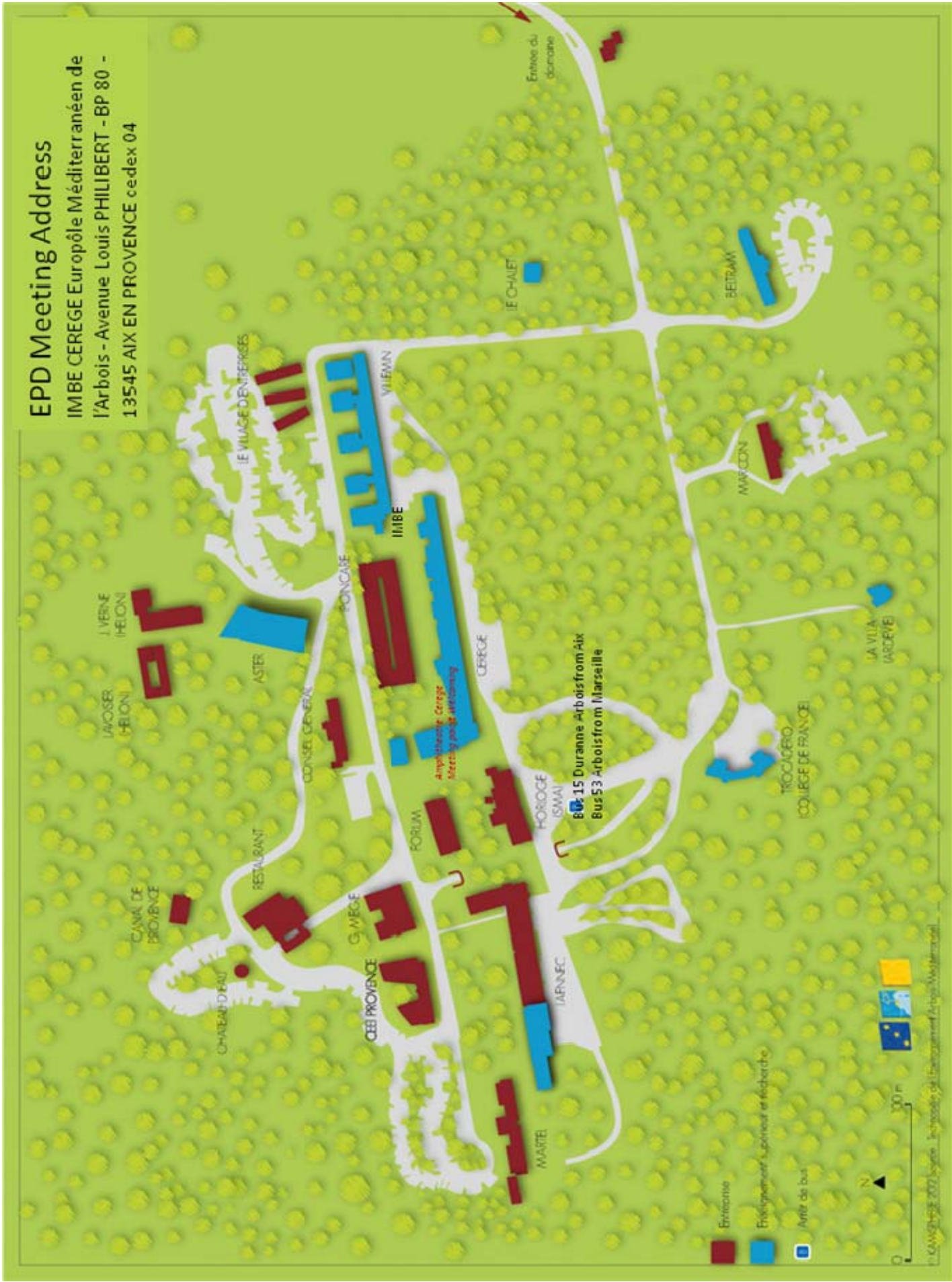
IMBE/CEREGE

Europôle Méditerranéen de l'Arbois

Avenue Louis Philibert, BP 80

13545, AIX EN PROVENCE, cedex 04 France

Map of the EPD Meeting



INTRODUCTION

The European Pollen Database (EPD) is an important research and educational tool as well as data repository. Its usefulness requires contributions from the palaeoecological community, while providing a useful resource. This interaction between data producers and users was discussed at an open meeting in Aix-en-Provence in 2007 and led to a new open structure in its development and administration. The initial burst of activity has declined and one purpose of this meeting is to create new momentum, interest scientists in supporting and working with the EPD, while educating palaeoecologists how to use the EPD in their own research and teaching more effectively.

Organising Committee

Michelle Leydet
Thomas Giesecke
Jacques-Louis de Beaulieu
Morteza Djamali
Maryse Alvitre
Cecile Langlois
IMBE Team



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 *Timetable*

EPD Meeting Program

01.-03.06.2016 Aix en Provence

01.06. Wednesday

9:00 – 9:00 Arrival, Registration, Poster placement

9:30 -10:30 Welcome, State of the EPD, past and current activities and scope of this meeting

Speakers: *Jacques-Louis de Beaulieu, Michelle Leydet, Richard Bradshaw, Thomas Giesecke*

10:30-11:00 Coffee

11:00 – 11:30 *Joël Guiot*: Holocene vegetation and climatic changes in the Mediterranean area and comparison with global warming projections

11:30 – 12:00 *Marie José Gaillard*: Pollen-based quantitative reconstructions of past land cover for climate modelling: contribution to the PAGES LandCover6k initiative.

12:00 – 12:30 *Chronis Tzedakis*: Long pollen sequences and their chronological framework: confessions of a 'wiggle-matcher'

12:30 – 13:00 *Eric Grimm*: Neotoma Paleoecology Database: Community-led Cyberinfrastructure for Global Change Research

13:00 – 14:00 Lunch

14:00 – 16:00 Plenum and Group discussions

16:00-16:30 Coffee

16:30 –17:30 Poster flash – One-minute poster presentations

17:30 – ~21:00 Poster session /Ice breaker with drinks and food

02.06. Thursday

9:30 – 10:00 *Ralph Fyfe*: Human impacts on vegetation: from the local scale to continental synthesis

10:00 – 10:30 *Boris Vannièrè & Daniele Colombaroli*: The Global Paleofire Working Group and the Global Charcoal Database: review and new insights

10:30-11:00 Coffee

11:00 – 13:00 Parallel workshops

- | | |
|--|---|
| 1. Tilia and Neotoma | <i>Eric Grimm</i> |
| 2. Charcoal software and database | <i>Boris Vannièrè, Walter Finsinger</i> |
| 3. Surface samples | <i>Basil Davis</i> |
| 4. LRA: PPEs, REVEALS, LOVE | <i>Petr Kuneš, Martin Theuerkauf</i> |
| 5. Help in pollen and NPP identification | <i>Benjamin Dietre, Steffen Wolters</i> |
| 6. Using the EPD with 'R' | <i>Alistair Seddon, Joseph Chipperfield</i> |
| 7. Age depth modelling | <i>Thomas Giesecke</i> |

13:00 – 14:00 Lunch

14:00 – 16:00 Parallel workshops continue

16:00-16:30 Coffee

16:30 – 18:30 Plenum and Group discussions

03.06. Friday

9:30 – 10:00 *Maria Fernanda Sanchez Goñi*: The ACER pollen database: vegetation response to the abrupt changes of the last glacial

10:00 – 10:30 *Richard Bradshaw*: Use of pollen data to set targets for nature conservation

10:30 – 11:00 *Thomas Giesecke*: Using the EPD to explore the postglacial vegetation dynamics of Europe

11:00-11:30 Coffee

11:30 – 13:00 Plenum discussions

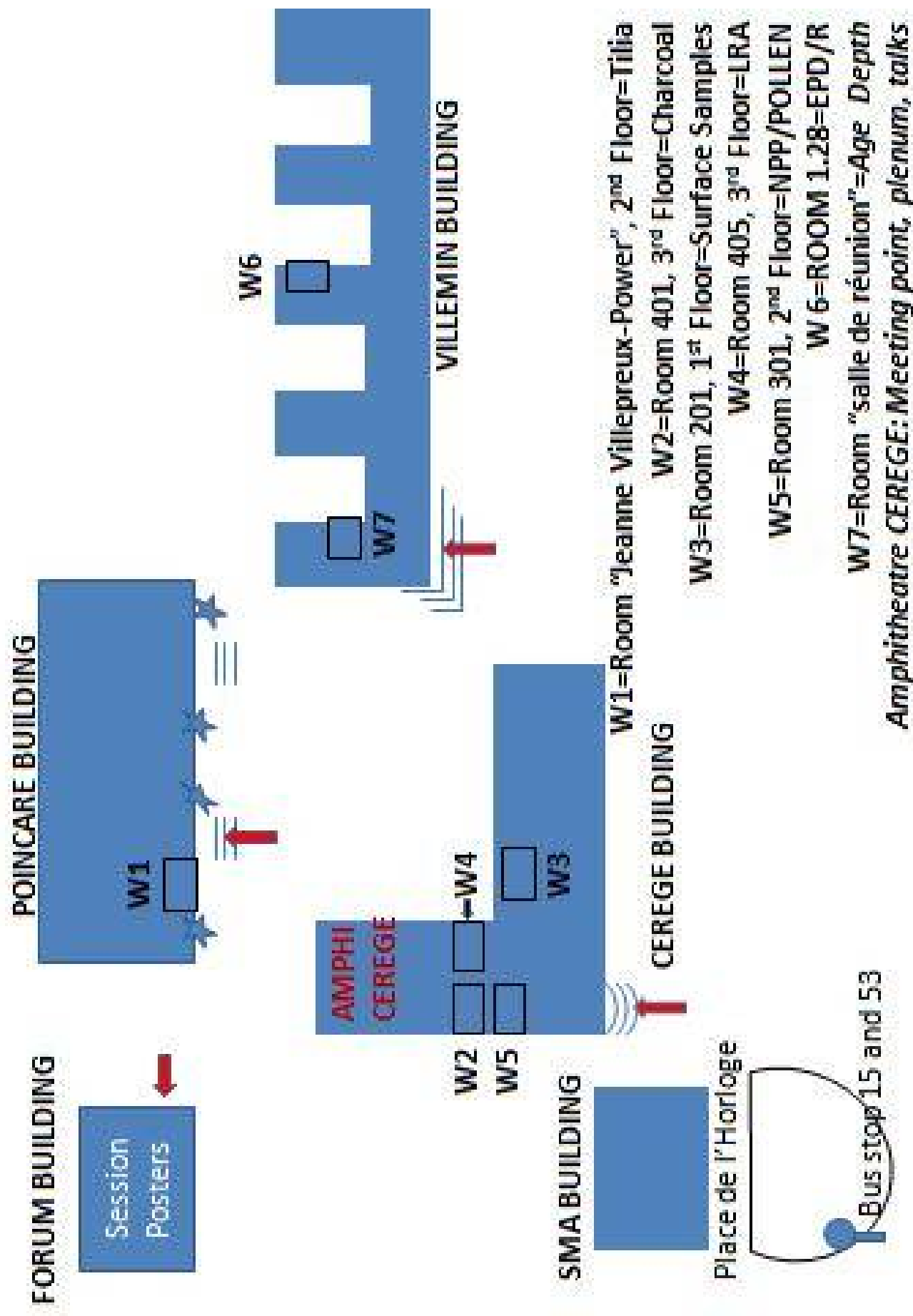
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16:00-16:30 Coffee

16:30 – 18:30 Parallel workshops continue



Oral communications

In chronological order:

Jacques-Louis de Beaulieu: Welcome and a little bit of History

Richard Bradshaw: The transition from formal governance to a community structure

Michelle Leydet: The current status of the EPD

Thomas Giesecke: Current activities and future developments

Joël Guiot: Holocene vegetation and climatic changes in the Mediterranean area and comparison with global warming projections

Marie José Gaillard: Pollen-based quantitative reconstructions of past land cover for climate modelling: contribution to the PAGES LandCover6k initiative

Chronis Tzedakis: Long pollen sequences and their chronological framework: confessions of a 'wiggler-matcher'

Eric Grimm: Neotoma Paleoecology Database: Community-led Cyberinfrastructure for Global Change Research

Ralph Fyfe: Human impacts on vegetation: from the local scale to continental synthesis

Boris Vanni re & Daniele Colombaroli: The Global Paleofire Working Group and the Global Charcoal Database: review and new insights

Maria Fernanda Sanchez Go ni: The ACER pollen database: vegetation response to the abrupt changes of the last glacial

Richard Bradshaw: Use of pollen data to set targets for nature conservation

Thomas Giesecke: Using the EPD to explore the postglacial vegetation dynamics of Europe

Training workshops

1) Tilia and Neotoma

Eric Grimm

Tilia is a spreadsheet and graph program developed by Eric Grimm to manipulate individual palaeoecological datasets. It also serves as an upload and download tool to Neotoma. The program is widely used in the community. New features and capacities have been recently added and participants will be trained in using the new and older functionality first hand.

2) Charcoal software and database

Boris Vanni re, Walter Finsinger

Charcoal analysis is often carried out in conjunction with pollen analysis and some charcoal data is stored in the EPD, however, a specialized community with a separate database and a set of analytical tools has emerged. Here we aim to train palaeoecologists in how to analyze data using the latest numerical tools.

3) EPD Surface samples and modern analogue reconstructions

Basil Davis

A new EPD surface sample dataset has been assembled and is available for climate or land-cover reconstructions using the analogue method. The workshop will provide training in how to use the surface sample data for quantitative reconstructions for individual pollen diagrams.

4) Quantitative vegetation reconstructions using the Landscape Reconstruction Algorithm (PPEs, REVEALS, LOVE)

Petr Kuneš, Martin Theuerkauf

The Landscape Reconstruction Algorithm is a functional approach to reconstruct past land-cover quantitatively. It contains several components and requires relative pollen productivity estimates that have been obtained for several European regions. This workshop will focus on the application of the LOVE and REVEALS model with available data, and will also provide an introduction and discussion on how to obtain relative pollen productivity estimates in the field.

5) An introduction to Non Pollen Palynomorphs and help with pollen identification

Jean Nicolas Haas, Benjamin Dietre, Steffen Wolters

The identification and taxonomy of pollen and Non Pollen Palynomorphs (NPP) is an important prerequisite for all subsequent data analysis. We will set up a number of microscopes manned by experts in pollen morphology to give palynologists an opportunity to share their knowledge or get help with difficult types. The analysis of NPPs is still a new field and the taxonomy not yet consolidated. Here we will offer introduction to NPP analysis aimed at palaeoecologists who so far do not include these types in their analysis or want to broaden their knowledge.

6) Using the EPD with 'R

Alistair Seddon, Joseph Chipperfield

The data analysis software R is increasingly used in ecology and palaeoecology to carry out data analyses. We will show participants how the EPD can be directly queried from within the R-environment, and train analysts in how to use and alter pre-existing scripts which are increasingly published alongside analytical results.

7) Age depth modelling and EPD chronologies

Thomas Giesecke

Age depth modelling is a prerequisite for data interpretation, comparison and analysis of nearly all stratigraphic data. It is increasingly important to communicate age uncertainties and make them part of the analysis. We will provide hands on training in classical and Bayesian age-depth modelling and discuss advantages and disadvantages of the various approaches. In addition, we will explain in depth the dual classification systems adopted for age models in the EPD.

1

Reconstruction of spatial organization within archaeological sites through pollen and non-pollen palynomorphs analyses. Preliminary results from the early Neolithic site of La Draga (Girona, Spain).

Jordi Revelles¹ and Francesc Burjachs^{2,3,4}

¹ *Departament de Prehistòria, Universitat Autònoma de Barcelona, Edifici B Facultat de Filosofia i Lletres, 08193 Bellaterra (Barcelona), Spain.*

² *Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Catalonia, Spain.*

³ *Institut Català de Paleoecologia Humana i Evolució Social (IPHES), Campus Sescelades URV (Edifici W3), 43007 Tarragona, Spain.*

⁴ *Departament d'Història i Història de l'Art, Facultat de Lletres, Universitat Rovira i Virgili, Avinguda Catalunya 35, 43002 Tarragona, Spain.*

Presenter: Jordi Revelles [Jordi.Revelles\(at\)uab.cat](mailto:Jordi.Revelles(at)uab.cat)

2

EPD and ArkeoGIS : data exchange and implementation between archaeology and palynology

Loup Bernard¹

¹ *Maison Interuniversitaire des Sciences de l'Homme, University of Strasbourg, 5 allée du général Rouvillois CS 50008, 67083 Strasbourg, France.*

Presenter: Loup Bernard loup [bernard\(at\)unistra.fr](mailto:bernard(at)unistra.fr)

3

Holocene climate change, vegetation dynamics, lake-level changes and anthropogenic impacts in the Lake Urmia region, NW Iran

Talebi, T.¹, Ramezani, E.¹, Djamali, M.², Alizadeh, H.³, Naqinezhad, A.⁴, Alizadeh, K.⁵,
Andrieu-Ponel, V.²

¹ *Department of Forestry, Faculty of Natural Resources, Urmia University, Urmia, Iran.*

² *IMBE, Aix-Marseille Université, CNRS, IRD, Avignon Université, Europôle Méditerranéen de l'Arbois, BP80,13545 Aix-en-Provence cedex 04, France*

³ *Iranian National Institute for Oceanography and Atmospheric Science (INIOAS), Tebran, Iran*

⁴ *Faculty of Sciences, University of Mazandaran, Babolsar, Mazandaran, Iran*

⁵ *Department of Palynology and Climate Dynamics, University of Göttingen, Göttingen, Germany*

Presenter: Kamaledin Alizadeh [kamal.alizadeh\(at\)biologie.uni-goettingen.de](mailto:kamal.alizadeh(at)biologie.uni-goettingen.de)

Palynological and Physiochemical Monitoring of Iranian Honey

Akbari Azirani, T.¹, Ramezani, E.², Henareh, F.², Alizadeh, K.³, Behling, H.³

¹ *Department of Physical Geography, Faculty of Earth Sciences, Shahid Beheshti University, Iran.*

² *Department of Forestry, Faculty of Natural Resources, Urmia University, Iran*

³ *Department of palynology and climate dynamics, University of Goettingen, Germany*

Presenter: Tayebeh Akbari Azirani [t_akbari\(at\)sbu.ac.ir](mailto:t_akbari@sbu.ac.ir)

Pollen-based reconstruction of the Middle and Late Holocene vegetation and climate history of the upper Kama region (middle Cis-Urals, Russia)

Elena Lapteva¹

¹ *Laboratory of Paleocology, Institute of Plant and Animal Ecology, Ural Branch, Russian Academy of Sciences 8 Marta st., 202, Yekaterinburg, the Russian Federation, 620144.*

Presenter: Elena Lapteva [lapteva\(at\)ipae.uran.ru](mailto:lapteva@ipae.uran.ru)

Pollen- Late Glacial and Early Holocene Vegetation and Climate Development in Bohemian – Moravian Highlands (Czech Republic)

Markéta G. Švarcova^{1,2}, Helena Svitavska Svobodova¹, Petr Kuneš^{1,2} & Péter Szabó²

¹ *Institute of Botany, Academy of Sciences of the Czech Republic*

² *Department of Botany, Faculty of Sciences, Charles University in Prague, Czech Republic*

Presenter: Helena Svitavska Svobodova [dr.helena.svobodova\(at\)seznam.cz](mailto:dr.helena.svobodova@seznam.cz)

Pollen-based climate reconstructions for the last 15,6 ka in the central Italian Alps

Roberta Pini¹, Cesare Ravazzi¹, Lorenzo Castellano², and Francesca Vallè³

¹ *CNR-IDPA Milano, Italia*

² *University of New York, USA*

³ *University of Milano, Bicocca, Italia*

Presenter: Roberta Pini [roberta.pini\(at\)idpa.cnr.it](mailto:roberta.pini(at)idpa.cnr.it)

From Late Pliocene to Early Pleistocene: pollen-inferred vegetation and climate change in the north Caucasus, north-western Caspian region

Olga D. Naidina¹

¹ *Geological Institute, Russian Academy of Sciences, Moscow, Russia*

Presenter: Olga D. Naidina [onaidina\(at\)gmail.com](mailto:onaidina(at)gmail.com)

The representation of taxa in surface pollen spectra of boreal forests and tundra inlands of Russia

Larisa A. Savelieva¹, Elena A. Rasnitsyn^{2,3}

¹ *Saint-Petersburg State University, St-Petersburg, Russia*

² *Alfred Wegener Institute for Polar and Marine Research, Potsdam, Germany*

³ *Arctic and Antarctic Research Institute, St. Petersburg, Russia*

Presenter: Larisa Savelieva [savelieval\(at\)mail.ru](mailto:savelieval(at)mail.ru)

Drivers of regional and local boreal forest dynamics during the Holocene

Niina Kuosmanen^{1,2}

¹ *Department of Forest Ecology, Czech University of Life Sciences Prague*

² *Department of Geosciences and Geography, University of Helsinki*

Presenter: [kuosmanen.niina\(a\)gmail.com](mailto:kuosmanen.niina(a)gmail.com)

Pollen-inferred millennial changes in landscape patterns at a major biogeographical interface within Europe

Eva Jamrichová ^{1,2}, Libor Petr ¹, Borja Jiménez- Alfaro ¹, Vlasta Jankovská ², Lydie Dudová ^{2,1}, Petr Pokorný ³, Piotr Kołaczek ⁴, Valentina Zernitskaya ⁵, Malvína Čierníková⁶, Eva Břízová ⁷, Petra Hájková^{1,2} & Michal Hájek ¹

¹ *Department of Botany and Zoology, Faculty of Science, Masaryk University, Brno, Czech Republic*

² *Department of Vegetation Ecology, the Czech Academy of Science, Brno, Czech Republic*

³ *Center for Theoretical Study, Charles University in Prague and the Academy of Sciences of the Czech Republic, Prague, Czech Republic*

⁴ *Department of Biogeography and Paleocology, Adam Mickiewicz University in Poznań, Poznań, Poland*

⁵ *Institute of Nature Management, National Academy of Belarus, Minsk, Republic of Belarus*

⁶ *Department of Soil Science, Comenius University in Bratislava, Bratislava, Slovakia*

⁷ *Czech Geological Survey, Prague, Czech Republic*

Presenter: Eva Jamrichová [Eva.Jamrichova\(at\)ibot.cas.cz](mailto:Eva.Jamrichova(at)ibot.cas.cz)

MARCO POLO – new and simple tool for pollen-based stand-scale vegetation reconstruction

Almut Mrotzek¹

¹ *Institute for Botany and Landscape Ecology, Greifswald University, Germany*

Presenter: Almut Mrotzek [almut.mrotzek\(at\)gmx.de](mailto:almut.mrotzek(at)gmx.de)

European alpine floods aggravated by past Human impact: coupled evidences from sedimentological and pollen analysis of Lake of Allos

E. Brisset^{1,2}, F. Guiter¹, C. Miramont¹, T. Troussier¹, P. Sabatier³, Y. Poher², R. Cartier^{1,2}, F. Arnaud³,
E. Malet³, E. Anthony^{2,4}

¹ *Aix-Marseille Université, Université d'Avignon, CNRS, IRD, UMR 7263 IMBE, Aix-en-Provence, France*

² *Aix-Marseille Université, CNRS, IRD, Collège de France, UM 34 CEREGE, Aix-en-Provence, France*

³ *Université Savoie Mont Blanc, CNRS, UMR 5204 EDYTEM, Le-Bourget-du-Lac, France*

⁴ *Institut Universitaire de France*

Presenter: Elodie Brisset [elodie.brisset\(at\)gmail.com](mailto:elodie.brisset(at)gmail.com)

**Investigation of Paleoclimatological and Paleoenvironmental Changes of Lake Yeniçağa (Bolu, Turkey)
During the Holocene Period**

Prof. Dr Demet Biltekin¹ and Devrim Kaynar¹

¹ *Eurasia Earth Science Institute Istanbul Technical University, Turkey*

Presenter: Devrim Kaynar [kaynard\(at\)tiu.edu.tr](mailto:kaynard@tiu.edu.tr)

**New pollen sites in central-eastern Europe:
Results of an interdisciplinary project on long-term woodland dynamics**

Petr Kuneš^{1,2}, Lydie Dudová^{1,3}, Radim Hédl¹, Eva Jamrichová^{1,3}, Jan Kolář¹, Lucie Křížová¹, Jana Müllerová⁴, Sylvie Suchánková¹, Markéta Švarcová^{1,2}, Helena Svobodová-Svitavská⁴, Peter Tkáč¹ & Péter Szabó¹

¹ *Department of Vegetation Ecology, Institute of Botany of the Czech Academy of Sciences, Brno, Czech Republic*

² *Department of Botany, Faculty of Science, Charles University in Prague, Czech Republic*

³ *Department of Botany and Zoology, Faculty of Science, Masaryk University, Brno, Czech Republic*

⁴ *Department of GIS and Remote Sensing, Institute of Botany of the Czech Academy of Sciences, Průhonice, Czech Republic*

Presenter: Petr Kuneš [petr.kunes\(at\)natur.cuni.cz](mailto:petr.kunes@natur.cuni.cz)

Size Matters: Quantification of microscopic charred particles in pollen slides

Frederike Verbruggen¹, Ignace Bourgeois² and Philippe Crombé³

¹ *BLAX Consult Biological Archaeology & Environmental Reconstruction Symon Spiersweg 7-D2, 1506 RZ Zaandam, the Netherlands*

² *Province of Antwerp – Heritage Department, Koningin Elisabethlei 22, B-2018 Antwerp, Belgium*

³ *Ghent University – Department of Archaeology, Section Prehistory of western Europe, Sint-Pietersnieuwstraat 35, B-9000 Ghent, Belgium*

Presenter: Frederike Verbruggen [verbruggen\(at\)biax.nl](mailto:verbruggen@biax.nl)

The development of vegetation of peatbog from late middle
Holocene to recent days - preliminary results

Malvína Čierniková¹

¹ *Department of Soil Science, Faculty of Sciences, Comenius University in Bratislava, Slovak Republic*

Presenter: Malvína Čierniková [hortinka\(at\)gmail.com](mailto:hortinka(at)gmail.com)

PYROS : An example of using the EPD and GPWK addressing broad spacial questions

Graciela Gil-Romera¹, María Leunda¹, Josu Aranbarri¹, Penélope González Sampériz¹

¹ *Instituto Pirenaico de Ecología-CSIC, Campus de Aula Dei. Avda Montañana 1005, 50059 Zaragoza, Spain*

Presenter: Graciela Gil-Romera [graciela.gil\(at\)ipe.csic.es](mailto:graciela.gil(at)ipe.csic.es)

Hydroclimatic changes in Talesh Mts, NW-Iran, during the Lateglacial and Holocene, based on
chironomid and pollen analyses

Cyril Aubert¹, Morteza Djamali¹, Frédéric Guibal¹, Hamid Lahijani², Abdolmajid Naderi², Jacques-Louis
de Beaulieu¹, Ali Pourmand³, Arash Sharifi³, Alain Thiéry¹, Philippe Ponel¹,
Tayebeh Akbari Azirani⁴, Emmanuel Gandouin¹

¹ *Aix-Marseille Université, Université d'Avignon, CNRS, IRD, UMR 7263 IMBE, Aix-en-Provence, France*

² *INIOAS: Iranian National Institute for Oceanography and Atmospheric Sciences, Tebran, Iran*

³ *Rosenstiel School of Marine and Atmospheric Science, Department of Marine Geosciences, RSMAS/MGG, University of Miami, USA.*

⁴ *Department of Palynology and Climate Dynamics, Georg-August-University of Göttingen and Department of Physical Geography, Faculty of Earth Sciences,
Shahid Beheshti University, Tebran, Iran*

Presenter: Cyril Aubert [cyril.aubert\(at\)imbe.fr](mailto:cyril.aubert(at)imbe.fr)

Potential of high-altitude pollen record of an Alpine peat bog for quantitative paleoclimate estimates

Giulia Furlanetto^{1,2}, Federica Badino¹, Michele Brunetti³, Elena Champvillair¹, Mattia De Amicis¹,
Valter Maggi¹, Roberta Pini², Cesare Ravazzi², Francesca Vallé¹

¹ *Dept. of Environmental and Earth Sciences, University of Milano – Bicocca, Italy*

² *CNR - IDPA, Research Group Vegetation, Climate, Human Stratigraphy - Lab. of Palynology and Palaeoecology*

³ *CNR - Institute of Atmospheric Sciences and Climate (ISAC), Bologna*

Presenter: Giulia Furlanetto [g.furlanetto1\(at\)campus.unimib.it](mailto:g.furlanetto1(at)campus.unimib.it)

“Fire & biodiversity conservation” an initiative to assess biodiversity responses to disturbance regimes

D. Colombaroli¹, P. van der Knaap¹, J. van Leeuwen¹, W. Tinner¹ & GPWG collaborators*

¹ *Oeschger Centre for Climate Change Research and Institute of Plant Sciences, University of Bern, Switzerland*

* <http://www.gpwg.paleofire.org>

Presenter: Daniele Colombaroli [daniele.colombaroli\(at\)ips.unibe.ch](mailto:daniele.colombaroli(at)ips.unibe.ch)

Reconstructing past herbivore abundance using dung fungal spores: a taphonomic approach

Eline van Asperen¹

¹ *Liverpool John Moores University, UK*

Presenter: Eline van Asperen [envanasperen\(at\)palaeo.eu](mailto:envanasperen(at)palaeo.eu)

**Coupled terrestrial and aquatic ecosystems evolution of Lake Allos since ca. 13,500 cal. BP
(Mediterranean French Alps)**

Rosine Cartier¹, E. Brisset¹, F. Sylvestre², F. Guiter¹, C. Paillès², C. Miramont¹

¹ *Aix-Marseille University, CNRS, IRD, UMR 7263 IMBE, France*

² *Aix-Marseille University, CNRS, UM 34 CEREGE, France*

Presenter: Rosine Cartier [cartier\(at\)cerege.fr](mailto:cartier(at)cerege.fr)

Extracting data from the European Pollen Database using EPDr package for R

Diego Nieto-Lugilde¹, Grettel Vargas-Azofeifa¹, José Manjón-Cabeza¹, Francisca Alba-Sánchez¹

¹ *Department Botánica. Facultad de Ciencias, Universidad de Granada, Spain*

Presenter: Francisca Alba-Sánchez [falba\(at\)ugr.es](mailto:falba(at)ugr.es)

Long-term dynamics of a remarkable Corsican wetland (Bagliettu peatland, 209 m a.s.l.)

Yoann Poher¹, Philippe Ponel¹, Frédéric Médail¹, Valérie Andrieu-Ponel¹, Frédéric Guiter¹

¹ *Aix-Marseille Université, Université d'Avignon, CNRS, IRD, UMR 7263 IMBE, Aix-en-Provence, France*

Presenter: Yoann Poher [yoann.poher\(at\)imbe.fr](mailto:yoann.poher(at)imbe.fr)

Late Holocene vegetation dynamics and disturbance regimen in North Patagonia (Lat 38°-40°S)

Alvarez-Barra, V.¹, Fontana, S¹ and Giesecke, T¹

¹ *Palynology and Climate Dynamics, Georg-August-Universität Göttingen, Germany*

Presenter: Valentina Alvarez-Barra [valentina.alvarez.barra\(at\)gmail.com](mailto:valentina.alvarez.barra(at)gmail.com)

A consortium charged with the task of indexing Mediterranean biodiversity data, a new way for datamining in ecology

Romain David¹, Jean-Pierre Ferral¹, and Thierry Taton¹

¹ *Aix-Marseille Université, Université d'Avignon, CNRS, IRD, UMR 7263 IMBE, Aix-en-Provence, France*

Presenter: Romain David [romain.david\(at\)imbe.fr](mailto:romain.david(at)imbe.fr)

Complementing the Pollen Data ☒ Refining the Understanding of Climate-Human-Environment Interactions- Two Case Studies from SE Norway and NW Russia -

Magda Wieckowska-Lüth

¹ *Graduate School 'Human Development in Landscapes' Institute of Prehistoric and Protohistoric Archaeology, University of Kiel*

Presenter: Magda Wieckowska-Lüth [mwickowska\(at\)ufg.uni-kiel.de](mailto:mwickowska(at)ufg.uni-kiel.de)

Holocene vegetation dynamics of sub-montane rainforests following volcanic deposition in the Kerinci Seblat National Park, Sumatra (Indonesia)

Christina Ani Setyaningsih¹, Siria Biagioni, Asmadi Saad, Yudhi Achnopa, Supiandi Sabiham, Hermann Behling

¹ *Department of Palynology and Climate Dynamics, University of Goettingen, Germany*

Presenter: Christina Ani Setyan [csetyan\(at\)gwdg.de](mailto:csetyan(at)gwdg.de)

Late glacial and Holocene environmental history on the eastern slope of the Middle Ural Mountains, Russia.

N.K. Panova¹, T.G. Antipina¹

¹ *Botanic Garden, Ural Branch, Russian Academy of Sciences, Russia Federation*

Presenter: Tatiana Antipina [antanya1306\(at\)mail.ru](mailto:antanya1306(at)mail.ru)

The improvement of the FPD tool

Armand Rotereau¹, M. Barbier-Leydet², R. David², and E. Gandouin²

¹ *Eccorev-CNRS, Aix-Marseille, France*

² *Aix-Marseille Université, Université d'Avignon, CNRS, IRD, UMR 7263 IMBE, Aix-en-Provence, France*

Presenter: Armand Rotereau [rotereau\(at\)eccorev.fr](mailto:rotereau(at)eccorev.fr)

Palynology in Romania—state of the art—

Roxana Grindean¹, Ioan Tanțău¹, Angelica Feurdean^{1,2}

¹ Babeş-Bolyai University, Department of Geology, M. Kogălniceanu Street 1, 400084 Cluj-Napoca, Romania

² Senckenberg Biodiversity and Climate Research Centre (BiK-F), Senckenberganlage 25, D-60325, Frankfurt am Main, Germany

Presenter: Roxana Grindean [roxana.grindean\(at\)yahoo.com](mailto:roxana.grindean(at)yahoo.com)

Reaction of biota to the late glacial climate amelioration in the Danubian Lowland (SW Slovakia)

Anna Potuckova^{1,3}, Eva Jamrichova^{1,3}, Michal Horsak², Libor Petr² and Petra Hajkova^{2,3}

¹ Department of Botany, Charles University in Prague, Prague, CZ;

² Department of Botany and Zoology, Masaryk University, Brno, CZ;

³ Department of Vegetation Ecology, Institute Botany, The Czech Academy Sciences, Brno, CZ

Presenter: Anna Potuckova [annapotuckova6\(at\)gmail.com](mailto:annapotuckova6(at)gmail.com)

Vegetation history of the Eastern Romanian Carpathians during the Late Glacial recorded in sediments from Mohoş crater

Papadopoulou M.L.¹, Bormann M.¹, Magyari E.K.², Veres D.³, Schäbitz F.¹

¹ University of Cologne, Institute of Geography Education, Cologne, Germany

² Eötvös Loránd University, Department of Palynology, Budapest, Hungary;

³ Romanian Academy, Institute of Speleology "Emil Racovita", Cluj-Napoca, Romania

Presenter: Papadopoulou Maria [maria.papadopoulou\(at\)uni-koeln.de](mailto:maria.papadopoulou(at)uni-koeln.de)

New PPEs for key Mediterranean taxa and adaptation of the REVEALS model for lagoon's geometry

Azuara J.¹, Mazier F.², Lebreton V.¹, Marquer L.³, Demunnik N.², Cugny C.², Combourieu-Nebout N.¹.

¹ HNHP, UMR 7194 CNRS, Muséum national d'Histoire naturelle, France

² GEODE, UMR 5602 CNRS Université Toulouse-Jean Jaurès, France

³ Department of Physical Geography and Ecosystem Science, Lund University, Sweden

Presenter: Julien Azuara [jazuara2\(at\)mnhn.fr](mailto:jazuara2(at)mnhn.fr)

On the edge: thresholds of woodland regeneration

Althea Davies

¹ *Department of Geography & Sustainable Development, University of St Andrews, Scotland*

Presenter: Althea Davies [ald7\(at\)st-andrews.ac.uk](mailto:ald7(at)st-andrews.ac.uk)

Asynchronous expansion of *Fagus* in the Hercynian highland

Lydie Dudová^{1,2}, Michal Hájek², Jan Kolář^{1,3}

¹ *Department of Vegetation Ecology, Institute of Botany of the Czech Academy of Sciences, Lidická 25/27, CZ-60200 Brno, Czech Republic*

² *Department of Botany and Zoology, Faculty of Science, Masaryk University, Kotlářská 2, CZ-61137 Brno, Czech Republic*

³ *Institute of Archaeology and Museology, Faculty of Arts, Masaryk University, Arne Nováka 1, CZ-60200 Brno, Czech Republic*

Presenter: Lydie Dudová [cvilinek\(at\)gmail.com](mailto:cvilinek(at)gmail.com)

Heterogenous pattern in fire activity in a homogenous climate: test using Holocene charcoal records from Northern Romanian Carpathians

Gabriela Florescu^{1,3}, Ioan Tanțău², Anca Geantă², Angelica Feurdean³

¹ *Stefan cel Mare University of Suceava, Romania*

² *Babeş-Bolyai University, Cluj-Napoca, Romania*

³ *Biodiversity and Climate Research Centre BiK-F, Frankfurt am Main, Germany*

Presenter: Gabriela Florescu [gabriella.florescu\(at\)yahoo.com](mailto:gabriella.florescu(at)yahoo.com)

Comparison of the modern vegetation with pollen spectra in terrestrial and lacustrine surface samples of the Lake El'gygytgyn (Chukotka, Russia)

Elena Raschke^{1,2}

¹ *Alfred Wegener Institute for Polar and Marine Research, Potsdam, Germany*

² *Arctic and Antarctic Research Institute, St. Petersburg, Russia*

Presenter: Elena Raschke [elena.raschke\(at\)awi.de](mailto:elena.raschke(at)awi.de)

**Spatio-temporal changes in forest composition inferred from fossil pollen records in the Upper
Midwestern USA**

Andria Dawson¹, Christopher Paciorek², Jason McLachlan³, Simon Goring⁴, John W. Williams⁴, &
Stephen Jackson^{5,1}

¹ *University of Arizona, USA*

² *University of California, Berkeley, USA*

³ *University of Notre Dame, USA*

⁴ *University of Wisconsin-Madison, USA*

⁵ *United States Geological Survey, USA*

Presenter: Andria Dawson [andria.dawson\(at\)gmail.com](mailto:andria.dawson(at)gmail.com)

Determination of Modern Pollen Deposition in Murat Mountain

Selin Uluçay¹, Nurgül Karlioğlu Kiliç¹, Çetin Şenkuş², Hülya Caner³

¹ *Istanbul University, Faculty of Forestry, Department of Forest Botany, Istanbul - Turkey*

² *Süleyman Demirel University, Department of Geography, Isparta - Turkey*

³ *Istanbul University, Institute of Marine Sciences and Management, Istanbul - Turkey*

Presenter: Selin Uluçay [ulucayselin\(at\)gmail.com](mailto:ulucayselin(at)gmail.com)

**Determination of Late Holocene vegetational history of Aktaş Lake and its surrounding area by
Palynological Analysis**

Sinem Ersin¹, Nurgül Karlioğlu Kiliç¹, Hülya Caner², Ahmet Evren Erginal³

¹ *Istanbul University, Faculty of Forestry, Department of Forest Botany, Bahçeköy-İstanbul, TURKEY*

² *Istanbul University, Institute of Marine Sciences and Management, Vefa-İstanbul, TURKEY*

³ *Ardahan University, Faculty of Humanities and Letters, Department of Geography, Ardahan, TURKEY*

Presenter: Sinem Ersin [sinemersin\(at\)hotmail.com](mailto:sinemersin(at)hotmail.com)

Approaching to build up a Chinese Pollen Database

Jian Ni^{1,2}

¹ *Institute of Geochemistry, Chinese Academy of Sciences, 550081 Guiyang, China*

² *College of Chemistry and Life Sciences, Zhejiang Normal University, 321004 Jinhua, China*

Presenter: Jian Ni1 [nijian\(at\)vip.skleg.cn](mailto:nijian(at)vip.skleg.cn)

Palaeoecological Studies of Upper Montane Araucaria Forest and Grasslands in Southeastern and Southern Brazil

Maria Carolina G. de O. Portes^{1,2}; Hermann Behling¹

¹ *Department of Palynology and Climate Dynamics, Albrecht-von-Haller Institute for Plant Sciences, Georg-August University of Göttingen*

² *Instituto Chico Mendes de Conservação de Biodiversidade, Ministry of Environment, Brazilian Government*

Presenter: Maria Carolina G. de O. Portes¹ [mguarin\(at\)uni-goettingen.de](mailto:mguarin(at)uni-goettingen.de)

Mauritius on fire

Erik J de Boer¹, Will D Gosling¹, Jona de Kruif¹

¹ *Georg-August-Universität, Albrecht-von-Haller-Institut für Pflanzenwissenschaften, Abteilung Palynologie und Klimadynamik, Göttingen, Germany*

Presenter: Erik J de Boer [deboer.erikjan\(at\)gmail.com](mailto:deboer.erikjan(at)gmail.com)

Vegetation response to human, fire and volcanic disturbance in Araucaria araucana forests in southern South America

Ricardo Moreno-González¹

¹ *Department of Palynology and Climate Dynamics, University of Göttingen, Germany*

Presenter: Ricardo Moreno-González [r.morenogonzalez\(at\)stud.uni-goettingen.de](mailto:r.morenogonzalez(at)stud.uni-goettingen.de)

Middle East Pollen Reference Collection and Atlas

Coralie Santelli¹, and Morteza Djamali¹

¹ Aix-Marseille Université, Université d'Avignon, CNRS, IRD, UMR 7263 IMBE, Aix-en-Provence, France

Presenter: Morteza Djamali [morteza.djamali\(at\)imbe.fr](mailto:morteza.djamali(at)imbe.fr)

Modern Pollen Monitoring Studies in Turkey

Nurgül Karlioğlu Kiliç¹, Hülya Caner²

¹ Istanbul University, Faculty of Forestry, Department of Forest Botany, Istanbul - Turkey

² Istanbul University, Institute of Marine Sciences and Management, Istanbul - Turkey

Presenter: Nurgül Karlioğlu Kiliç [nurgulk\(at\)istanbul.edu.tr](mailto:nurgulk(at)istanbul.edu.tr)

Updated site compilation of the Latin American Pollen Database : Outreach to the community LatinAmericanPollenDB.com

Suzette Flantua

¹ Institute for Biodiversity and Ecosystem Dynamics (IBED), University of Amsterdam, The Netherlands

Presenter: Suzette Flantua [S.G.A.Flantua\(at\)uva.nl](mailto:S.G.A.Flantua(at)uva.nl)

Posidonia as environmental archive: long-term ecology and conservation views

Lourdes López-Merino¹, Oscar Serrano^{2,3}, María F. Adame⁴, Nieves R. Colás-Ruiz¹, Antonio Martínez Cortizas⁵, Miguel A. Mateo^{2,6}

¹ Brunel University London, UK

² Edith Cowan University, Australia

³ University of Western Australia, Australia

⁴ Griffith University, Australia

⁵ Universidad de Santiago de Compostela, Spain

⁶ CEAB, CSIC, Spain

Presenter: Lourdes López-Merino Lourdes.Lopez-Merino@brunel.ac.uk

Regional Pollen Database from South America

Vincent Montade

¹ *Department of Palynology and Climate Dynamics University of Göttingen, Göttingen, Germany.*

Presenter: Vincent Montade [vincent.montade\(at\)gmail.com](mailto:vincent.montade(at)gmail.com)

European Holocene landscape change: a comparison of pollen-based approaches to reconstructing land use shifts and forest decline

Jessie Woodbridge¹, Neil Roberts¹, Ralph Fyfe¹, Marie-José Gaillard², Anna-Kari Trondman², Basil Davis³ and Jed Kaplan³

¹ *School of Geography, Earth and Environmental Sciences, Plymouth University, UK*

² *School of School of Natural Sciences, Linnaeus University, Kalmar, Sweden*

³ *School of Institute of Earth Surface Dynamics, University of Lausanne, Lausanne Switzerland*

Presenter: Jessie Woodbridges [jessie.woodbridge\(at\)plymouth.ac.uk](mailto:jessie.woodbridge(at)plymouth.ac.uk)

Holocene climate change and landscape evolution in the Mediterranean-Saharan transition area of Southern Tunisia

S. Jaouadi¹, V. Lebreton¹, V. Bout-Roumazeilles², G. Siani³, R. Lakhdar⁴, N. Combourieu-Nebout¹

¹ *UMR 7194 CNRS, Muséum national d'Histoire naturelle, 1 rue René Panhard, 75013, Paris-France*

² *Laboratoire d'Océanologie et de Géosciences LOG, UMR8187, CNRS-Université Lille, France*

³ *CNRS-UMR 8148, IDES, Département des Sciences de la Terre, Université Paris Sud, Orsay, France*

⁴ *Faculté des Sciences de Bizerte, Université de Carthage, 7021 Zarzouna, Bizerte, Tunisia*

Presenter: Sahbi Jouadi [jaouadisahbi\(at\)yahoo.com](mailto:jaouadisahbi(at)yahoo.com)

Pollen productivity estimates in a biodiversity hotspot of Central Europe and sampling effort of the vegetation survey.

Vojtěch Abraham¹, Barbora Obstová², Jan Roleček², Zuzana Plesková², Přemysl Bobek¹, Karel Fajmon³,
Petr Kuneš¹

¹ Department of Botany, Faculty of Science, Charles University in Prague, Benátská 2, CZ-128 01 Praha 2

² Department of Vegetation Ecology, Institute of Botany of the Czech Academy of Sciences, Lidická 25/27, CZ-602 00 Brno

³ Czech Union for Nature Conservation, ZO 58/06 Bílé Karpaty, Bartolomějské náměstí 47, CZ-698 01 Veselí nad Moravou

Presenter: Vojtěch Abraham [vojtech.abraham\(at\)gmail.com](mailto:vojtech.abraham(at)gmail.com)

Pollen Monitoring Programme database - current status and basic statistic.

Vojtěch Abraham¹, Sheila Hicks, Pim van der Knaap², Jacqueline van Leuwen², Cristin Jensen, Eliso Kvavadze, Irena Pidek, Martina Hättestrand, Anna Filbrandt-Czaja, Achilles Gerasimidis, Mariana Filipova Marinova, Karl-Dag Vorren, Heather Pardoe, Margrét Hallsdóttir, Laimdota Kalnina, Agnieszka Noryskiewicz, Bozena Noryskiewicz, Elissaveta Bozilova, Heather Tinsleystrand, Lena Barnekow, Eniko Magyari, Tiiu Koff, Elena Pavlova, Thomas Giesecke³

¹ Department of Botany, Faculty of Science, Charles University in Prague, Benátská 2, CZ-128 01 Praha 2

² Oeschger Centre for Climate Change Research and Institute of Plant Sciences, University of Bern, Switzerland

³ Department of Palynology and Climate Dynamics, Albrecht-von-Haller-Institute for Plant Sciences, University of Göttingen, Germany

Presenter: Vojtěch Abraham [vojtech.abraham\(at\)gmail.com](mailto:vojtech.abraham(at)gmail.com)

2000 years of grazing history and the making of the Cretan Mountain landscape, Greece

Jouffroy-Bapicot I.¹, Vanniere B.¹, Iglesias V., Debret M., Delarras J.-F.

¹ Laboratoire Chrono-Environnement UMR6249CNRS/UFC UFR Sciences et Techniques, 16 route de Dray, 25030 Besançon, France

Presenter: Isabelle Jouffroy-Bapicot, [Isabelle.Jouffroy\(at\)univ-fcomte.fr](mailto:Isabelle.Jouffroy(at)univ-fcomte.fr)

Palynological results from the Lake Ladoga postglacial-glacial-preglacial sediment record

A.A. Andreev¹, L.A. Savelieva², L. Shumilovskikh³, R. Gromig¹, V. Wennrich¹,
G. Fedorov^{2,4}, D.A. Subetto⁵, S. Krastel⁶, B. Wagner¹, M. Melles¹

1 Institute of Geology and Mineralogy, University of Cologne, Germany;

2 St. Petersburg State University, Institute of Earth Sciences, St. Petersburg, Russia;

3 Georg-August University, Department of Palynology and Climate Dynamics, Göttingen, Germany;

4 Arctic and Antarctic Research Institute, St. Petersburg, Russia;

5 Northern Water Problems Institute, Russian Academy of Sciences, Petrozavodsk, Russia;

6 University of Kiel, Institute of Geosciences, Kiel, Germany

Presenter: Andrej, A. Andreev, [aandreev\(at\)uni-koeln.de](mailto:aandreev(at)uni-koeln.de)

Pollen and Non-Pollen Palynomorphs Analysis of the Zoogenic Deposits from the Ethiopian Highlands

Kuzmicheva, E.A.¹

1 Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow, Russia

Presenter: Evgeniya A. Kuzmicheva, [kuzmicheva.evgeniya\(at\)gmail.com](mailto:kuzmicheva.evgeniya(at)gmail.com)

List of participants

Dr. Alberte Bondeau

alberte.bondeau@jimbe.fr

Researcher, IMBE-CNRS, Europôle de l'Arbois,
Avenue Louis Philibert, Bât Villemin, BP 80 F-13545
Aix en Provence cedex 4, France

Alice Moravcová

moravcoa@natur.cuni.cz

Charles University of Prague, Faculty of Science,
Albertov 6, 128 43 Praha 2, Czech Republic

Dr. Alistair Seddon

Alistair.Seddon@bio.uib.no

Researcher, Department of Biology, University of
Bergen, Thormohlensgt. 53 A/B, Postboks 7803,
5020 Bergen, Norway

Alizadeh Kamaledin

kamal.alizadeh@biologie.uni-goettingen.de

PhD student, Department of Palynology and Climate
Dynamics, University of Göttingen, Wilhelmsplatz 1,
37073 Göttingen, Germany

Dr. Almut Mrotzek

almut.mrotzek@gmx.de

Department of Peatland Studies and Palaeoecology,
Greifswald Mire Centre, c/o Institute für Botany und
Landscape Ecology, Ernst Moritz Arndt University of
Greifswald, Soldmannstr. 15, D-17487 Greifswald,
Germany

Dr. Althea Davies

ald7@st-andrews.ac.uk

Lecturer, Environmental Geography, Department of
Geography & Sustainable Development, School of
Geography & Geosciences, University of St Andrews,
Irvine Building, North Street, St Andrews, Fife KY16
9AL, Scotland UK

Amy Flynn

Amy.Flynn2@brunel.ac.uk

PhD student, Institute of Environment, Brunel
University, Kingston Lane, Uxbridge, UB8 3PH,
London, UK

Dr. Andrej, A. Andreev

aandreev@uni-koeln.de

Institut für Geologie und Mineralogie, University of
Köln, Zùlpicher Str. 49a, 50674 Köln, Germany

Dr. Andria Dawson

andria.dawson@gmail.com

Postdoc, University of Arizona, Tucson, Arizona
85721, USA

Anna Potuckova

annapotuckova6@gmail.com

PhD student, Department of Botany, Faculty of
Science, Charles University, Albertov 6, 128 43 Praha
2, Czech Republic

Armand Rotereau

rotereau@eccorev.fr

CEREGE, Europôle de l'Arbois, Avenue Louis
Philibert, BP80, 13545 Aix en Provence cedex 4,
France

Dr. Basil Davis

Basil.Davis@unil.ch

Institute of Earth Surface Dynamics, University of
Lausanne, Geopolis Building, CH-1015 Lausanne
Switzerland

Benjamin Bourel

chebenjamin@laposte.net

Association Paléontologique des Hauts Plateaux du
Languedoc (APHPL). 14, chemin des écureuils, 48000
Mende, France

Benjamin Dietre

benjamin.dietre@uibk.ac.at

PhD student, Institut für Botanik, Universität
Innsbruck, Sternwartestraße 15, 6020 Innsbruck,
Austria

Dr. Boris Vannière

boris.vanniere@univ-fcomte.fr

Researcher, CNRS-UMR Chrono-environnement,
Université de Franche-Comté, 16 route de Gray F-
25030 Besançon cedex France

Dr. Brigitte Talon

brigitte.talon@jimbe.fr

Lecturer, IMBE, Aix-Marseille University, Europôle de
l'Arbois, Avenue Louis Philibert, Bât Villemin, BP 80
F-13545 Aix en Provence cedex 4, France

Cassy Berguet

cassy.berguet@hotmail.fr

Master 2 Research, IMBE, Aix-Marseille Université
Europôle de l'Arbois, Avenue Louis Philibert, Bât
Villemin, BP 80 F-13545 Aix en Provence cedex 4,
France

Cecile Langlois

cecile.langlois@jimbe.fr

Financial Manager
Europôle de l'Arbois, Avenue Louis Philibert, Bât
Villemin, BP 80 F-13545 Aix en Provence cedex 4,
France

Dr. César Morales del Molino

cesar.morales-del-molino@u-bordeaux.fr

Postdoc, UMR-CNRS 5805 EPOC, University of Bordeaux, Allée Geoffroy Saint-Hilaire, Bât. 18, FR-33615, Pessac Cedex, France

Dr. Cesare Ravazzi

cesare.ravazzi@idpa.cnr.it

Researcher, CNR-IDPA, Laboratorio di Palinologia e Paleocologia, U1 – DISAT – Università Milano Bicocca, Piazza della Scienza 1, 20126 Milano, Italy

Dr. Çetin Şenkul

cetinsenkul@gmail.com

Lecturer, Department of Geography, Faculty of Arts & Sciences, P.O.Box32260, Süleyman Demirel University, Isparta, Turkey

Christina Ani Setyaningsih

csetyan@gwdg.de

PhD student, Department of Palynology and Climate Dynamics, Albrecht-von-Haller-Institute for Plant Sciences, Georg-August-University Goettingen, Wilhelm-Weber Str. 2a, 37073 Goettingen, Germany

Prof. Chronis Tzedakis

p.c.tzedakis@ucl.ac.uk

Professor of Physical Geography, University College London, Gower Street, WC1E 6BT. London, UK

Cierniková Malvína

hortinka@gmail.com

PhD student, Comenius University Bratislava, Šafárikovo námestie 6, P.O.BOX 440, 814 99 Bratislava 1, Slovakia

Colin J. Courtney Mustaphi

colin.courtney-mustaphi@york.ac.uk

PhD student, York Institute for Tropical Ecosystems (KITE), Environment Department, University of York, UK

Coralie Santelli

coralie.santelli@imbe.fr

IMBE, Europôle de l'Arbois, Avenue Louis Philibert, Bât Villemin, BP 80 F-13545 Aix en Provence cedex 4, France

Cyril Aubert

cyril.aubert@imbe.fr

PhD student, IMBE, Europôle de l'Arbois, Avenue Louis Philibert, Bât Villemin, BP 80 F-13545 Aix en Provence cedex 4, France

Dr. Daniel Contreras

daniel.contreras@imbe.fr

Postdoc IMBE/GRECAM, Europôle de l'Arbois, Avenue Louis Philibert, Bât Villemin, BP 80 F-13545 Aix en Provence cedex 4, France

Dr. Daniele Colombali

daniele.colombali@ips.unibe.ch

Oeschger Centre for Climate Change Reserach and Institute of Plant Sciences, University of Bern, Altenbergrain 21, 3013 Bern, Switzerland

Devrim Kaynar

rdkdevrim@gmail.com

PhD student, the Geology Department and Eurasia Earth Science Institute, Istanbul Technical University, Ayazaga Campus, Sariyer, Turkey

Dr. Diego Nieto-Lugilde

dnietolugilde@gmail.com

Postdoc, Department Botánica Facultad de Ciencias, Universidad de Granada, Avda. Fuente Nueva sn, 18071, Granada, Spain

Dr. Doris Barboni

barboni@cerege.fr

Researcher, CEREGE, Europôle de l'Arbois, Avenue Louis Philibert, BP80, 13545 Aix en Provence cedex 4, France

Dr. Ekaterina Ershova

ekaterinagershova@mail.ru

Assistant Professor, Geobotany Department, Moscow State University, Moscow, GSP-1, Leninskie Gory, Moscow, 119991, Russian Federation

Dr. Elena Lapteva

helen_lapteva@mail.ru

Researcher, Laboratory of Paleocology, Institute of Plant and Animal Ecology, Ural Branch, Moscow State University, Moscow, GSP-1, Leninskie Gory, Moscow, 119991, Russian Federation

Dr. Elena Novenko

lenanov@mail.ru

Russian Academy of Sciences, 14 Leninskii avenue, 119991 Moscow, Russian Federation

Elena Raschke

elena.raschke@awi.de

Alfred Wegener Institute for Polar and Marine Research, Department of Periglacial Research, Telegrafenberg A43, 14473 Potsdam, Germany

Dr. Eline Van Asperen[envanasperen\(at\)palaeo.eu](mailto:envanasperen(at)palaeo.eu)

Postdoc, Research Centre in Evolutionary Anthropology, and Palaeoecology, School of Natural Sciences and Psychology, Liverpool John Moores University, James Parsons Building, Byrom Street, Liverpool L3 3AF, UK

Dr. Elodie Brisset[elodie.brisset\(at\)gmail.com](mailto:elodie.brisset(at)gmail.com)

Postdoc, IMBE, University of Aix-Marseille, Batiment Villemin, Europole de l'Arbois, 13545, Aix-en-Provence, France

Prof. Emilie Gauthier[Emilie.Gauthier\(at\)univ-fcomte.fr](mailto:Emilie.Gauthier(at)univ-fcomte.fr)

Professor, Laboratoire Chrono-environnement, UMR CNRS 6249, University of Bourgogne Franche-Comté, 16 Route de Gray, 25000 Besançon, France

Dr. Emmanuel Gandouin[emmanuel.gandouin\(at\)imbe.fr](mailto:emmanuel.gandouin(at)imbe.fr)

Lecturer, IMBE, Aix-Marseille University, Europôle de l'Arbois, Avenue Louis Philibert, Bât Villemin, BP 80 F-13545 Aix en Provence cedex 4, France

Dr. Eric Grimm[eric.c.grimm\(at\)outlook.com](mailto:eric.c.grimm(at)outlook.com)

Department of Earth Sciences, University of Minnesota, Minneapolis, MN 55455, USA

Dr. Erik De Boer[deboer.erikjan\(at\)gmail.com](mailto:deboer.erikjan(at)gmail.com)

Postdoc, Georg-August-Universität, Albrecht-von-Haller-Institut für Pflanzenwissenschaften, Abteilung Palynologie und Klimadynamik, Wilhelm-Weber-Str. 2a, 37073 Göttingen, Germany

Dr. Eva Jamrichova[Eva.Jamrichova\(at\)ibot.cas.cz](mailto:Eva.Jamrichova(at)ibot.cas.cz)

Researcher, Department of Vegetation Ecology, Department of Vegetation Ecology, Institute of Botany of the CAS, v.v.i., Lidická 25/27, 60200 Brno, Czech Republic

Evgeniya Kuzmicheva[kuzmicheva.evgeniya\(at\)gmail.com](mailto:kuzmicheva.evgeniya(at)gmail.com)

PhD student, Laboratory of Historical Ecology, Institute of Ecology and Evolution, Russian Academy of Sciences, Leninsky pr., 33, Moscow 119071, Russia Federation

Dr. Francesc Burjachs Casas[francesc.burjachs\(at\)icrea.cat](mailto:francesc.burjachs(at)icrea.cat)

Researcher, Institut Català de Paleoecologia Humana i Evolució Social, Universitat Rovira i Virgili, Campus Sescelades, 43007. Tarragona, Catalonia, Spain

Prof. Francisca Alba-Sánchez[falba\(at\)ugr.es](mailto:falba(at)ugr.es)

Professor, Deptment Botánica. Facultad de Ciencias, Universidad de Granada, Avda. Fuente Nueva sn, 18071, Granada - Spain

Dr. Frederic Guibal[frederic.guibal\(at\)imbe.fr](mailto:frederic.guibal(at)imbe.fr)

Researcher, IMBE-CNRS, Europôle de l'Arbois, Avenue Louis Philibert, Bât Villemin, BP 80 F-13545 Aix en Provence cedex 4, France

Dr. Frederike Verbruggen[verbruggen\(at\)biax.nl](mailto:verbruggen(at)biax.nl)

BIAX Consult Biologische archeologie and Landschapsreconstructie, Hogendijk 134 1506 AL Zaandam, Neterland

Dr. Gabriela Florescu[gabriella.florescu\(at\)yahoo.com](mailto:gabriella.florescu(at)yahoo.com)

Department of Geography, Stefan cel Mare University of Suceava, Universitatii 13, 720229, Suceava, Romania

Giulia Furlanetto[g.furlanetto1\(at\)campus.unimib.it](mailto:g.furlanetto1(at)campus.unimib.it)

PhD student, University of Milano - Bicocca, Deptment of Environmental and Earth Sciences, Milano, Italy

Dr. Graciela Gil-Romera[graciela.gil\(at\)ipe.csic.es](mailto:graciela.gil(at)ipe.csic.es)

Department of Geo-environmental Processes and Global Change, Pyrenean Institute of Ecology - CSIC, Campus de Aula Dei. Avda. Montañana 1005, CP 50059 Zaragoza, Spain

Grettel Vargas Azoifeifa[gvargas\(at\)correo.ugr.es](mailto:gvargas(at)correo.ugr.es)

Master student, University of Granada, Hospital Real, Avda. del Hospicio, s/n, 18010 Granada, Spain

Gwenaël Magne[gwenaelmagne\(at\)gmail.com](mailto:gwenaelmagne(at)gmail.com)

Master 2 Research, IMBE Aix-Marseille Université Europôle de l'Arbois, Avenue Louis Philibert, Bât Villemin, BP 80 F-13545 Aix en Provence cedex 4, France

Dr. Helena Svitavska Svobodova[dr.helena.svobodova\(at\)seznam.cz](mailto:dr.helena.svobodova(at)seznam.cz)

Institute of Botany, Czech Academy of Sciences, CZ-252 43 Pruhonice, Czech Republic

Ildikó Vincze

[ildi_vincze\(at\)yahoo.com](mailto:ildi_vincze@yahoo.com)

PhD student, Eötvös Loránd University, Budapest, Department of Physical and Applied Geology / MTA-MTM-ELTE Research Group for Paleontology, Pázmány Péter sétány 1/C, Budapest, H-1117, Hungary

Ilona Pál

[palilona\(at\)caesar.elte.hu](mailto:palilona@caesar.elte.hu)

PhD student, MTA-MTM-ELTE Research Group for Paleontology 1083, Ludovika tér, H-1431 Budapest, POB 137, Hungary

Dr. Isabelle Jouffroy-Bapicot

[Isabelle.Jouffroy\(at\)univ-fcomte.fr](mailto:Isabelle.Jouffroy@univ-fcomte.fr)

Laboratoire Chrono-Environnement UMR6249CNRS/UFC UFR Sciences et Techniques, 16 route de Dray, 25030 Besançon, France

Dr. Jacqueline van Leuwen

[jacqueline.vanleeuwen\(at\)jips.unibe.ch](mailto:jacqueline.vanleeuwen@jips.unibe.ch)

Oeschger Centre for Climate Change Research and Institute of Plant Sciences, University of Bern, Altenbergrain 21, 3013 Bern, Switzerland

Dr. Jacques-Louis de Beaulieu

[jacques-louis.debeaulieu\(at\)orange.fr](mailto:jacques-louis.debeaulieu@orange.fr)

Co-Supervisor of EPD Meeting organization Emeritus Researcher, IMBE-CNRS, Europôle de l'Arbois, Avenue Louis Philibert, Bât Villemin, BP 80 F-13545 Aix en Provence cedex 4, France

Prof. Jean Nicolas Haas

[Jean-Nicolas.Haas\(at\)uibk.ac.at](mailto:Jean-Nicolas.Haas@uibk.ac.at)

Professor, Institute of Botany, University of Innsbruck, Unit of Plant Evolution And Diversity, Research Group Palynology and Archaeobotany, Sternwartestrasse 15, A-6020 Innsbruck, Austria

Dr. Jessie Woodbridge

[jessie.woodbridge\(at\)plymouth.ac.uk](mailto:jessie.woodbridge@plymouth.ac.uk)

Postdoc, School of Geography, Earth and Environmental Sciences, Plymouth University, UK

Prof. Jian Ni

[nijian\(at\)vip.skleg.cn](mailto:nijian@vip.skleg.cn)

Professor, Global Change Ecology, State Key Laboratory of Environmental Geochemistry, Institute of Geochemistry, Chinese Academy of Sciences, Linceng West Road 99, Guanshanhu District 550081 Guiyang Guizhou Province, China

Jindrich Prach

[jindrprach\(at\)gmail.com](mailto:jindrprach@gmail.com)

PhD student, Center for Theoretical Study, Charles University in Prague, Jilská 1, 110 00, Praha 1, Czech Republic and Department of Botany, Faculty of Science, Charles University in Prague, Benátská 2, 128 01, Prague 2, Czech Republic

Dr. Joanna Swieta-Musznicka

[j.musznicka\(at\)ug.edu.pl](mailto:j.musznicka@ug.edu.pl)

Laboratory of Palaeoecology and Archaeobotany, Department of Plant Ecology, University of Gdansk, ul. Wita Stwosza 59, 80-308 Gdansk, Poland

Dr. Joel Guiot

[guiot\(at\)cerege.fr](mailto:guiot@cerege.fr)

Researcher, CEREGE and Director of ECCOREV Federation, Europôle de l'Arbois, Avenue Louis Philibert, BP 80 F-13545 Aix en Provence cedex 4, France

Jordi Revelles

[Jordi.Revelles\(at\)uab.cat](mailto:Jordi.Revelles@uab.cat)

PhD student, Department of Prehistory in Universitat Autònoma de Barcelona, Edifici B Facultat de Filosofia i Lletres 08193 Bellaterra, Barcelona, Spain

Dr. Joseph Chipperfield

[Joseph.Chipperfield\(at\)uib.no](mailto:Joseph.Chipperfield@uib.no)

Postdoc, Department of Biology, University of Bergen, Thormohlensgt. 53 A/B, Postboks 7803, 5020 Bergen, Norway

Julien Azuara

[jazuara2\(at\)mnhn.fr](mailto:jazuara2@mnhn.fr)

PhD student, Museum National d'Histoires Naturelles, 57 Rue Cuvier, 75005, Paris, France

Kevin Lemmonier

[klod\(at\)locean-ipsl.upmc.fr](mailto:klod@locean-ipsl.upmc.fr)

PhD student, UNIVERSITE PIERRE ET MARIE CURIE, case 100, 4 place jussieu, 75252 PARIS CEDEX 05

Dr. Larisa Savelieva

[savelieval\(at\)mail.ru](mailto:savelieval@mail.ru)

Associate Professor, Institute of Earth Sciences, St. Petersburg State University, 7-9, St Petersburg Russian Federation

Lauren Shotter

[Lauren.Shotter\(at\)ed.ac.uk](mailto:Lauren.Shotter@ed.ac.uk)

PhD Student, School of GeoSciences, University of Edinburgh, Room 3.09, Institute of Geography, Drummond Street, Edinburgh, EH8 9XP, Scotland, UK

Loick Bechon

[loick.bechon\(at\)ens-lyon.fr](mailto:loick.bechon(at)ens-lyon.fr)

Master 2 Research, IMBE Aix-Marseille Université
Europôle de l'Arbois, Avenue Louis Philibert, Bât
Villemin, BP 80 F-13545 Aix en Provence cedex 4,
France

Dr. Loup Bernard

[loup.bernard\(at\)unistra.fr](mailto:loup.bernard(at)unistra.fr)

Lecturer, Maison Interuniversitaire des Sciences de
l'Homme, University of Strasbourg, 5 allée du
général Rouvillois CS 50008, 67083 Strasbourg
cedex, France

Dr. Lourdes Lopez-Merino

[Lourdes.Lopez-Merino\(at\)brunel.ac.uk](mailto:Lourdes.Lopez-Merino(at)brunel.ac.uk)

Institute of Environment, Health and Societies, UK
Brunel University London, Kingston Lane, Uxbridge,
UB8 3PH, London, UK

Dr. Lydie Dudová

[cvilinek\(at\)gmail.com](mailto:cvilinek(at)gmail.com)

Department of Vegetation Ecology, Institute of
Botany, The Czech Academy of Sciences, University
of Masaryk, Žerotínovo nám. 617/9, 601 77 Brno,
Czech Republic

Dr. Magda Wieckowska-Lüth

[mwickowska\(at\)ufg.uni-kiel.de](mailto:mwickowska(at)ufg.uni-kiel.de)

Postdoc, Institute of Prehistoric and Protohistoric
Archaeology, University of Kiel, Christian-Albrechts-
Platz 4, 24118 Kiel, Germany

Dr. Marcelina Zymni

[m.zimny\(at\)ug.edu.pl](mailto:m.zimny(at)ug.edu.pl)

University of Gdansk, Department of Plant Ecology,
Laboratory of Palaeoecology & Archaeobotany, Wita
Stwosza 59, 80-308 Gdansk, POLAND

Marco Zanon

[mzanon\(at\)gshdl.uni-kiel.de](mailto:mzanon(at)gshdl.uni-kiel.de)

PhD student, Graduate School "Human Development
in Landscapes", University of Kiel, Christian-
Albrechts-Platz 4, 24118 Kiel, Germany

Maria Papadopoulou

[maria.papadopoulou\(at\)uni-koeln.de](mailto:maria.papadopoulou(at)uni-koeln.de)

PhD student, Project B2, University of Köln,
Bernhard-Feilchenfeld-Str. 11, Room 1.85, D-50969
Köln

Maria Carolina Guarinello de Oliveira Portes

[mguarin\(at\)uni-goettingen.de](mailto:mguarin(at)uni-goettingen.de)

PhD student, Department of Palynology and Climate
Dynamics of Göttingen University, Wilhelmsplatz 1,
37073 Göttingen, Germany

Dr. Maria Fernanda Sanchez-Goni

[mf.sanchezgoni\(at\)epoc.u-bordeaux1.fr](mailto:mf.sanchezgoni(at)epoc.u-bordeaux1.fr)

Researcher, University of Bordeaux, Bâtiment B18
Allée Geoffroy Saint-Hilaire, CS 50023, 33615 PESSAC
CEDEX, France

Marie-Charlotte Bellinghery

[macha\(at\)bellinghery.fr](mailto:macha(at)bellinghery.fr)

Master 1 Research, IMBE, Aix-Marseille Université,
Europôle de l'Arbois, Avenue Louis Philibert, Bât
Villemin, BP 80 F-13545 Aix en Provence cedex 4,
France

Prof. Marie-José Gaillard

[marie-jose.gaillard-lemdahl\(at\)lnu.se](mailto:marie-jose.gaillard-lemdahl(at)lnu.se)

Professor, School of Natural Sciences, Linnaeus
University, Barlastgatan 11, SE-39182 Kalmar,
Sweden

Dr. Martin Theuerkauf

[martin.theuerkauf\(at\)uni-greifswald.de](mailto:martin.theuerkauf(at)uni-greifswald.de)

Physische Geographie, Institut für Geographie and
Geologie, University of Greifswald, F.L. Jahn Strasse
16, D-17487 Greifswald, Germany

Maryse Alvitre

[maryse.alvitre\(at\)imbe.fr](mailto:maryse.alvitre(at)imbe.fr)

Technical and Administrative Manager
IMBE, Aix-Marseille University, Europôle de l'Arbois,
Avenue Louis Philibert, Bât Villemin, BP 80 F-13545
Aix en Provence cedex 4, France

Michelle Barbier-Leydet

[michelle.leydet\(at\)imbe.fr](mailto:michelle.leydet(at)imbe.fr)

Data Manager of the European Pollen Database
IMBE, Aix-Marseille University, Europôle de l'Arbois,
Avenue Louis Philibert, Bât Villemin, BP 80 F-13545
Aix en Provence cedex 4, France

Dr. Morteza Djamali

[morteza.djamali\(at\)imbe.fr](mailto:morteza.djamali(at)imbe.fr)

Researcher, IMBE-CNRS, Europôle de l'Arbois,
Avenue Louis Philibert, Bât Villemin, BP 80 F-13545
Aix en Provence cedex 4, France

Dr. Mustafa Doğan

[mustafaadogann02\(at\)gmail.com](mailto:mustafaadogann02(at)gmail.com)

Research Assistant, Department of Geography,
Faculty of Arts & Sciences, P.O.Box32260, Süleyman
Demirel University, Isparta, Turkey

Dr. Nadine Pickarski

[pickarski\(at\)uni-bonn.de](mailto:pickarski(at)uni-bonn.de)

Research Assistant, University of Bonn, Steinmann
Institute for Geology, Mineralogy, and Paleontology,
Nussallee 8, D-53115 Bonn, Germany

Dr. Niina Kuosmanen

kuosmanen.niina@gmail.com

Postdoc, Department of Forest Ecology, Czech University of Life Sciences Prague, Albertov 6, 128 43 Praha 2, Czech Republic

Dr. Nurgül Karlioğlu

nurgulk@istanbul.edu.tr

Faculty of Forestry, Department of Forest Botany, University of Istanbul, Bahçeköy-Sarıyer/Istanbul, Turkey

Olesya Smyshlyeva

zzzzzuka@mail.ru

Master 1 Student, Department of Geobotany, Moscow State University, ul. Leninskiye Gory, 1, Moscow, 119991, Russia Federation

Dr. Olga Borizova

olgakborizova@gmail.com

Researcher, Institute of Geography, Russian Academy of Sciences, Moscow 119017, Staromonetny, 29, Russia Federation

Olga D. Naidina

onaidina@gmail.com

PhD student, Palynologist, Geological Institute, Russian Academy of Sciences, Biostratigraphy and Paleogeography, Pyzhevsky, 7, 119017 Moscow, Russia

Dr. Petr Kunes

petr.kunes@natur.cuni.cz

Assistant Professor, Department of Botany, Faculty of Science, Charles University in Prague, Albertov 6, 128 43 Praha 2, Czech Republic

Dr. Pim van der Knaap

knaap@ips.unibe.ch

Oeschger Centre for Climate Change Reserach and Institute of Plant Sciences, University of Bern, Altenbergrain 21, 3013 Bern, Switzerland

Dr. Ralph Fyfe

ralph.fyfe@plymouth.ac.uk

Associate Professor, Geospatial Information, School of Geography, Earth and Environmental Sciences, Plymouth University, UK

Renée Enevold

re@moesgaardmuseum.dk

PhD student, Deptment of Geoscience, Aarhus University, Department. of Archaeological Science and Conservation, Moesgaard Museum, DK-8270 Hoejbjerg, Denmark

Ricardo Moreno

richo.m@gmail.com

PhD Student, Department of Palynology and Climate Dynamics, University of Göttingen, Untere Karspüle 2, 37073 Göttingen, Germany

Prof. Richard Bradshaw

Richard.Bradshaw@liverpool.ac.uk

Professor, School of Environmental Sciences, University of Liverpool, Jane Herdman Building, Liverpool L69 3GP, UK

Dr. Roberta Pini

roberta.pini@idpa.cnr.it

Resercher, C.N.R. - Istituto per la Dinamica dei Processi Ambientali, Gruppo di Ricerche Stratigrafiche Vegetazione, Clima, Uomo, Laboratorio di Palinologia Paleoecologia, Piazza della Scienza 1, 20126 Milano (I)

Romain David

romain.david@imbe.fr

PhD student, Aix-Marseille University, IMBE, Station Marine d'Endoume OSU institut Pytheas, Chemin de la Batterie des Lions, 13 007 Marseille, France

Rosine Cartier

cartier@cerge.fr

PhD student, IMBE/CEREGE
Europôle de l'Arbois, Avenue Louis Philibert, BP80, 13545 Aix en Provence cedex 4, France

Roxana Grindean

roxana.grindean@yahoo.com

PhD student, Babes-Bolyai University, Department of Geology, Strada Mihail Kogălniceanu 1, Cluj-Napoca 400084, Roumania

Sahbi Jaouadi

jaouadisahbi@yahoo.com

PhD student, National Museum of Paris (MNHN), 57 Rue Cuvier, 75005, Paris, France

Dr. Sampson Panajiotidis

pansamp@for.auth.gr

Assistant Professor, School of Forestry and Natural Environment of the Aristotle University of Thessaloniki, University Campus, 54124 Thessaloniki, Greece

Selin Uluçay

ulucayselin@gmail.com

Master Student, Faculty of Forestry, Department of Forest Botany, University of Istanbul, Bahçeköy-Sarıyer/Istanbul, Turkey

Sinem Ersin

sinemersin@hotmail.com

Master Student, Faculty of Forestry, Department of Forest Botany, University of Istanbul, Bahçeköy-Sarıyer/Istanbul, Turkey

Dr. Sonia Fontana

sonia.fontana@biologie.uni-goettingen.de

Dr. Department of Palynology and Climate Dynamics, Albrecht-von-Haller-Institute for Plant Sciences, University of Göttingen, Untere Karspüle 2, 37073 Göttingen, Germany

Dr. Steffen Wolters

wolters@nihk.de

Lecturer, Niedersächsisches Institut für historische Küstenforschung (NIhK), Viktoriastraße 26/28, D-26382 Wilhelmshaven, Germany

Dr. Suzanne, A.G. Leroy

Suzanne.Leroy@brunel.ac.uk

Professor, Institute of Environment, Brunel University London, Kingston Lane, Uxbridge, Middlesex UB8 3PH, London, UK

Suzette Flantua

S.G.A.Flantua@uva.nl

Institute for Biodiversity and Ecosystem Dynamics (IBED), University of Amsterdam, P.O. Box 94248, 1090 GE Amsterdam, The Netherlands

Tatiana Antipina

antanya1306@mail.ru

Russian Academy of Sciences, Ural Branch: Institute Botanic Garden, Laboratory Population Biology of Wood Plants & Dynamic of the Forest, 620144, Yekaterinburg, 8 Marta str., 202A, Russia Federation

Dr. Tatyana Sapelko

tsapelko@mail.ru

Institute of Limnology, Russian Academy of Sciences, Sevastyanov Street 9, 196105 St.Petersburg, Russia Federation

Dr. Tayebah Akbari Azirani

tayebakbari@gmail.com

Postdoc, Department of Palynology and Climate Dynamics, Albrecht-von-Haller-Institute for Plant Sciences, Georg-August-University of Göttingen and Assistant Prof. of Climatology, Department of Physical Geography, Faculty of Earth Sciences, Shahid Beheshti University (S.B.U), Tehran, Iran

Dr. Thomas Giesecke

Thomas.Giesecke@biologie.uni-goettingen.de

Co-Supervisor of EPD Meeting organization
Lecturer, Department of Palynology and Climate Dynamics, Albrecht-von-Haller-Institute for Plant Sciences, University of Göttingen, Untere Karspüle 2, 37073 Göttingen, Germany

Turkan Memiş

memisturkan@gmail.com

Master of Arts student, Department of Geography, Faculty of Arts & Sciences, P.O.Box32260, Süleyman Demirel University, Isparta, Turkey

Valentina Alvarez Barra

valentina.alvarez.barra@gmail.com

PhD Student, Department of Palynology and Climate Dynamics, University of Göttingen, Untere Karspüle 2, 37073 Göttingen, Germany

Dr. Valérie Andrieu-Ponel

valerie.andrieu-ponel@jimbe.fr

Lecturer, IMBE, Aix-Marseille University, Europôle de l'Arbois, Bâtiment Villemin, Avenue Louis Philibert, BP80, 13545 Aix en Provence cedex 4, France

Dr. Vincent Montade

vincent.montade@gmail.com

Postdoc, University of Göttingen, Untere Karspüle 2, 37073 Göttingen, Germany

Dr. Vivian Astrup Felde

Vivian.Felde@uni.no

Postdoc, VISTA, Norwegian Academy of Science and Letters, C/O Institute for Biology at University of Bergen, P.O.Box 7800, 5020 Bergen, Norway

Dr. Vojtech Abraham

vojtech.abraham@gmail.com

Researcher, Department of Botany, Faculty of Science, Charles University in Prague, Ovocný trh 3-5, 116 36 Praha 1, Prague, Czech Republic

Dr. Walter Finsinger

walter.finsinger@univ-montp2.fr

Researcher, CNRS Centre de Bio-Archeologie et d'Ecologie, Institut de Botanique, University of Montpellier, 163, rue A. Broussonet 34090 Montpellier, France

William Hiles

wh34@st-andrews.ac.uk

PhD student, Department of Geography and Sustainable Development, University of St. Andrews, Irvine Building, North Street, St. Andrews, UK

Dr. Yavar Moshirfar

[moshirfar\(at\)gmail.com](mailto:moshirfar(at)gmail.com)

Research Assistant on Drivers of Pontcasoian
Biodiversit Rise and Demise Project, Brunel
University London, Kingston Lane, Uxbridge, UB8
3PH, London, UK

Yoann Poher

[yoann.poher\(at\)imbe.fr](mailto:yoann.poher(at)imbe.fr)

PhD student, IMBE, University of Aix-Marseille,
Batiment Villemin, Europole de l'Arbois, 13545, Aix-
en-Provence

Zeynep Atazelim

[Zeynep.Ataselim\(at\)brunel.ac.uk](mailto:Zeynep.Ataselim(at)brunel.ac.uk)

PhD student, University of Brunel, Kingston Lane,
Uxbridge, UB8 3PH, London, UK