INDEX

Session codes ................................................................. pag. 4
General program ......................................................... pag. 5
Committees ................................................................. pag. 6
Welcomes ........................................................................ pag. 7-8
Plenary Speakers ........................................................... pag. 9-11
Wednesday 10th May Oral Sessions ......................... pag. 12-18
Wednesday 10th May Poster Sessions ...................... pag. 18-23
Thursday 11th May Oral Sessions ............................... pag. 24-30
Thursday 11th May Poster Sessions ............................ pag. 31-35
Friday 12th May Oral Sessions ..................................... pag. 36-41
Friday 12th May Poster Sessions ............................... pag. 42-47
Saturday 13th May Oral Sessions .............................. pag. 48-54
Saturday 13th May Poster Sessions ........................... pag. 54-59
Main Floor / -1 Floor .................................................... pag. 60
Practical info ............................................................... pag. 61-63
Social Events .............................................................. pag. 64-65
Fields trips post Meeting ........................................... pag. 66-67
Sponsors ....................................................................... pag. 68-71
### Session Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEN</td>
<td>Open Session on past global changes</td>
</tr>
<tr>
<td>SH</td>
<td>Quaternary climate and environmental change in the Southern Hemisphere</td>
</tr>
<tr>
<td>2K</td>
<td>Regional and transregional climate variability over the last 2000 years</td>
</tr>
<tr>
<td>MED</td>
<td>From the Mediterranean to the Caspian: palaeoclimate variability, environmental responses and human adaptive strategies</td>
</tr>
<tr>
<td>DIST</td>
<td>Disturbance dynamics across spatial and temporal scales: fire, wind, pathogens and post-disturbance run off as drivers of environmental change</td>
</tr>
<tr>
<td>MPT</td>
<td>Before and after - climate contrasts across the MPT</td>
</tr>
<tr>
<td>HIST</td>
<td>Historical Climate Reconstruction and Impacts of the Common Era</td>
</tr>
<tr>
<td>VOLC</td>
<td>Volcanic eruptions: the thread connecting climate records, societal change and future climate projections?</td>
</tr>
<tr>
<td>PALSEA</td>
<td>Ice-sheet and sea-level variability during late-Cenozoic warm periods: PALSEA2</td>
</tr>
<tr>
<td>INTER</td>
<td>Climate of Quaternary Interglacials from observations and model simulations</td>
</tr>
<tr>
<td>OCEAN</td>
<td>Trace elements and their isotopes as geochemical proxies of past ocean conditions</td>
</tr>
<tr>
<td>PLIO</td>
<td>Pliocene climate variability over glacial-interglacial timescales (PlioVAR)</td>
</tr>
<tr>
<td>HYD</td>
<td>Hydroclimate variability through the ages: Data, models, mechanisms</td>
</tr>
<tr>
<td>HOL</td>
<td>The Holocene - its climate variability and rapid transitions</td>
</tr>
<tr>
<td>FLOOD</td>
<td>Multidisciplinary reconstruction of paleofloods</td>
</tr>
<tr>
<td>ACC</td>
<td>Abrupt climate change: Challenges for Earth system understanding</td>
</tr>
<tr>
<td>AQUA</td>
<td>Human Impact on Global Aquatic Systems</td>
</tr>
<tr>
<td>BIO</td>
<td>Do species move, adapt or die? Exploring past biodiversity, ecological change and community dynamics in the fossil record</td>
</tr>
<tr>
<td>HUM</td>
<td>From early human impacts to the Great Acceleration: A paleoscience perspective on the climate-landscape-human multiple connections</td>
</tr>
<tr>
<td>GREEN</td>
<td>Understanding past variations in atmospheric greenhouse gases to constrain future feedbacks in the Earth System</td>
</tr>
<tr>
<td>REG</td>
<td>Regional syntheses of human-climate-environment interactions</td>
</tr>
<tr>
<td>MON</td>
<td>Regional versus global in past monsoon dynamic: disentangling wind and precipitation proxies.</td>
</tr>
<tr>
<td>AFR</td>
<td>Palaeoenvironments of Africa: Pliocene to Present</td>
</tr>
<tr>
<td>DATA</td>
<td>Data Stewardship for Paleoscience</td>
</tr>
<tr>
<td>5MILL</td>
<td>The climate record of the past 5 million years: from the seasonal cycle to Ice Ages</td>
</tr>
<tr>
<td>GROUND</td>
<td>Climate variability signals in groundwater (and unsaturated zone) archives</td>
</tr>
<tr>
<td>DUST</td>
<td>Global Dust Deposition in Past, Present, and Future Climates</td>
</tr>
<tr>
<td>COMMON</td>
<td>Large-scale hydroclimate variability and change of the Common Era: Patterns, Impacts, and Processes</td>
</tr>
<tr>
<td>DNA</td>
<td>Ancient DNA for understanding past biodiversity, human history, and drivers of ecosystem changes: achievements, limits and perspectives</td>
</tr>
<tr>
<td>FLUX</td>
<td>Sediment Flux: Past Peaks and Troughs</td>
</tr>
</tbody>
</table>

### Working groups meetings

- **EEFA**: Extreme events and risk assessment
- **QUIGS**: Working Group on Quaternary Interglacials
- **2K**: Working Group PAGES 2k Network
- **GPWG**: Global Paleofire Working Group
- **CHN**: Climate History Network
- **FLOOD**: Floods Working Group
- **PMIP**: Paleoclimate Modelling Intercomparison Project
- **PALCOM**: INQUA Palaeoclimate Commission
- **HABCOM**: Humans and Biosphere INQUA Commission
### TUESDAY 9th MAY

From 18:00 Registration | 19:30 Icebreak party (Multiusos room)

### WEDNESDAY 10th MAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:45-10:30</td>
<td>Welcome ceremony</td>
</tr>
<tr>
<td>11:00-13:00</td>
<td>MED</td>
</tr>
<tr>
<td>13:00-15:00</td>
<td>Lunch (Multiusos room)</td>
</tr>
<tr>
<td>15:00-17:00</td>
<td>MED</td>
</tr>
<tr>
<td>17:00-19:00</td>
<td>Poster sessions (Hipostila room): MED, HYD, VOLC, OCEAN, AFR, MON, 5MILL, PALSEA</td>
</tr>
<tr>
<td>19:30</td>
<td>Soccer match: “Las Ocas” terrace bar in José Antonio Labordeta Park</td>
</tr>
</tbody>
</table>

### THURSDAY 11th MAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-10:30</td>
<td>Plenary talks (Mozart room): Gabi Hegerl</td>
</tr>
<tr>
<td>11:00-13:00</td>
<td>MED</td>
</tr>
<tr>
<td>13:00-15:00</td>
<td>Lunch (Multiusos room)</td>
</tr>
<tr>
<td>15:00-17:00</td>
<td>2K</td>
</tr>
<tr>
<td>17:00-19:00</td>
<td>Poster sessions (Hipostila room): 2K, COMMON, FLOOD, BIO, DNA, DUST, GREEN, GROUND</td>
</tr>
<tr>
<td>19:30</td>
<td>Film night: “Before the Flood” in the Cerbuna Cine Club, C/ Pedro Cerbuna 12, 50009 Zaragoza (in Spanish)</td>
</tr>
</tbody>
</table>

### FRIDAY 12th MAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-10:30</td>
<td>Plenary talks (Mozart room): Eric Wolff and Hannah Moersberger</td>
</tr>
<tr>
<td>11:00-13:00</td>
<td>2K</td>
</tr>
<tr>
<td>13:00-15:00</td>
<td>Lunch (Multiusos room)</td>
</tr>
<tr>
<td>15:00-17:00</td>
<td>2K</td>
</tr>
<tr>
<td>17:00-19:00</td>
<td>Poster sessions (Hipostila room): ACC, HOL, INTER, DIST, AQUA, OPEN</td>
</tr>
<tr>
<td>20:30</td>
<td>Gala Dinner: Aura Restaurant, Avenida de José Atarés 7, 50018 Zaragoza</td>
</tr>
</tbody>
</table>

### SATURDAY 13th MAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-10:30</td>
<td>Poster sessions (Hipostila room): SH, REG, HIST, HUM, MPT, PLIO, DATA, FLUX</td>
</tr>
<tr>
<td>11:00-13:00</td>
<td>SH</td>
</tr>
<tr>
<td>13:00-15:00</td>
<td>Lunch (Multiusos room)</td>
</tr>
<tr>
<td>15:00-17:00</td>
<td>SH</td>
</tr>
<tr>
<td>17:00-19:00</td>
<td>Plenary talks (Mozart room): Ed Brook and Penélope González-Sampériz</td>
</tr>
<tr>
<td>19:30</td>
<td>Round-table discussion: “Climate change: from global to local challenges” (in Spanish), Patio de la Infanta, C/San Ignacio de Loyola 16</td>
</tr>
</tbody>
</table>

### SUNDAY 14th MAY

Field trip departures
CONFERENCE HOST

Pyrenean Institute of Ecology, Spanish National Research Council (IPE-CSIC)
Av. Montañana 1005 • 50059 Zaragoza • Spain
Phone: +34 976369393 • Fax: +34 974363222
www.ipe.csic.es

Local Organizing Committee

Blas Valero-Garcés, Pyrenean Institute of Ecology, CSIC, Zaragoza, Spain
Ana Moreno, Pyrenean Institute of Ecology, CSIC, Zaragoza, Spain
Penélope González-Sampériz, Pyrenean Institute of Ecology, CSIC, Zaragoza, Spain
Graciela Gil-Romera, Pyrenean Institute of Ecology, CSIC, Zaragoza, Spain
José Mª Garcia-Ruiz, Pyrenean Institute of Ecology, CSIC, Zaragoza, Spain
Juan Ignacio López-Moreno, Pyrenean Institute of Ecology, CSIC, Zaragoza, Spain
Jesús Julio Camarero, Pyrenean Institute of Ecology, CSIC, Zaragoza, Spain
Pilar Utrilla, University of Zaragoza (Prehistory), Zaragoza, Spain
Lourdes Montes, University of Zaragoza (Prehistory), Zaragoza, Spain
Rafael Domingo, University of Zaragoza (Prehistory), Zaragoza, Spain
Carlos Sancho, University of Zaragoza (Geology), Zaragoza, Spain
Gloria Cuenca, University of Zaragoza (Geology), Zaragoza, Spain

OSM Scientific Program Committee

Hubertus Fischer, University of Bern, Switzerland
Sheri Fritz, University of Nebraska, USA
Marie-France Loutre, PAGES IPO, Switzerland
Lucien von Gunten, PAGES IPO, Switzerland
Janet Wilmshurst, Landcare Research, New Zealand
Liping Zhou, Peking University, China
Pascale Braconnot, LSCE, France
Hugues Goosse, Université catholique de Louvain, Belgium
Yusuke Yokoyama, University of Tokyo, Japan
Blas Valero-Garcés, IPE-CSIC, Spain
Ana Moreno, IPE-CSIC, Spain
Penélope González-Sampériz, IPE-CSIC, Spain
The Local Organizing Committee of the 5th PAGES Open Science Meeting welcomes you to Zaragoza! Zaragoza, capital of Aragón, is the most populated city in the Ebro Valley (700,000 inhabitants). Located in the floodplain and the terraces of the Ebro River and two of its tributaries, the Huerva and Gállego Rivers, the fate of the city has always been tied to the ever-changing dynamics of the rivers. Already in the first centuries of our era, the Roman Forum and the sewage system had to be rebuilt at a higher elevation due to frequent and intense flooding. The surrounding territory, both in the floodplain and in the semi-arid steppes, has been used for agriculture since Neolithic times. The recent expansion of the city and the Universal Expo 2008 on Water and Sustainability have contributed to create a new social awareness about environmental issues and global change impacts. Suffering from floods and droughts, water availability and sustainable economy are always present for Zaragoza citizens.

In these times of rapid changes, our science is more useful than ever for the citizenship. We thank you all for presenting your science, participating in the discussions and field trips and creating links to strengthen PAGES as a global community. This corner of the world showcases the complexities of climate, biological, geological and human interactions during the Quaternary in “boundary” regions, where local synergies and regional teleconnections are essential part of global processes. The strategic geographic location of the Iberian Peninsula where continents meet and oceans and seas converge provides exceptional opportunities to investigate the dynamics of climate, environmental and human evolution in these frontier regions. Besides, the Iberian Peninsula has been a cultural bridge between Europe and Africa, playing an important role in human evolution and migration. It also constitutes an essential link between the Atlantic Ocean and the Mediterranean Sea, acting as a main player in all land-ocean interactions at mid latitudes.

After the long scientific sessions, we invite you to be part of the city. Spend some time strolling the city parks and the Ebro River; have some light dinner with “tapas” in bars and terraces downtown, visit the museums and old buildings to get a taste of the rich cultural background of the city: the Roman Walls, Forum and Theater, the Muslim Aljafería Palace, the Christian Churches, the Goya drawings. Enjoy the World Heritage Mudejar architecture, a syncretic art developed in the Christian kingdoms by Muslim artisans. The Mudejar star, the logo of our meeting, is a reminder of the positive outcomes when diverse minds and cultures meet.

We thank all supporters, sponsors and volunteers who have helped to organize and finance the 5th OSM meeting and wish you all a very productive, fruitful and inspiring meeting to face together the challenges ahead of us.

Blas Valero-Garcés, Penélope González-Sampériz, Graciela Gil-Romera and Ana Moreno on behalf of the Local Organizing Committee
After London (1998), Beijing (2005), Corvallis (2009), and Goa (2013), we are extremely happy to welcome you to Zaragoza for PAGES’ 5th Open Science Meeting (OSM).

Since its earliest days, the OSM has been a ground-breaking event designed to facilitate interactions between scientists from all career levels, disciplines and regions. We invite you to explore the richness of the various fields included within the PAGES’ umbrella and hope that this meeting will be the starting point for new collaborations.

Past Global Changes (PAGES) was founded in 1991 and supported by the US and Swiss National Science Foundations as a core project of the now defunct International Geosphere-Biosphere Programme (IGBP) until 2015. In 2016, PAGES became a Global Research Project of Future Earth, as well as a formal scientific partner of the World Climate Research Programme (WCRP), and is now supported by the US National Science Foundation and the Swiss Academy of Sciences.

PAGES’ scope of interest includes the physical climate system, biogeochemical cycles, ecosystem processes, biodiversity, and human dimensions, on different time scales - from the Pliocene to the recent past. It is open and inclusive to all scientists interested in past global changes. Over time, PAGES has evolved to address emerging challenges and scientific themes, with resultant changes in structure and scope. But the main objectives remain unchanged, and, after 25-years, PAGES is well-established and continues to be successful in its mission to catalyze international cooperation and foster high-quality science.

You are PAGES. Your involvement is vital. Propose, organize and/or participate in PAGES working groups and workshops, contribute articles or issue ideas for the Past Global Changes Magazine, receive up-to-date communications and opportunities via our e-news and social media accounts (Twitter and Facebook) and, of course, visit our information-rich website www.pastglobalchanges.org.

We would like to take this opportunity to thank all those who provided financial support, allowing us to organize the OSM and assemble such an inspiring, large, international group of scientists. Our thanks extend also to all those who dedicated their time and effort to ensure the event’s success.

We wish everyone a productive and inspiring meeting and a pleasant stay in Zaragoza!

Marie-France Loutre, Angela Wade and Lucien von Gunten
PAGES IPO

Sheri Fritz and Willy Tinner
PAGES Co-Chairs
**Nerilie Abram**  
The Australian National University, Canberra, Australia: nerilie.abram@anu.edu.au  
9:30 – 10:00 Early onset of industrial-era warming across the oceans and continents  
Nerilie Abram is an Associate Professor and Future Fellow at the Australian National University. She is also a Chief Investigator for the new Australian Centre of Excellence for Climate Extremes. Her research focuses on reconstructing climate changes over the last millennium, using a variety of methods including Antarctic ice cores, tropical reef corals and speleothems. Nerilie has played leadership roles in a number of the PAGES 2k regional working groups, and is part of the coordinator team for phase 3 of the PAGES 2k project.

**Julien Emile-Geay**  
University of Southern California, Los Angeles, USA: julieneg@usc.edu  
10:00 – 10:30 The future of old things: geoinformatics for better paleoscience  
Julien Emile-Geay is a mathematical paleoclimatologist working as an associate professor at the University of Southern California. Using deterministic and probabilistic models, he creates mathematical representations of the climate system to shed light on its dynamics. He is particularly interested in the role of the tropics in long-term climate change, and in constraining the magnitude of internal climate variations on a variety of timescales. As part of PAGES, Julien is active in the PAGES 2k group, in two main ways: The first is to develop innovative data stewardship approaches to extract greater information from existing paleoclimate records. The second is to use the rich array of paleoclimate records from the Common Era to uncover patterns of low-frequency climate variability in the spatial, temporal, and spectral domains, and use those to evaluate and improve climate models.

**Gabrielle Hegerl**  
Chair of Climate System Science University of Edinburgh, UK: gabi.hegerl@ed.ac.uk  
9:00 – 9:30 Determining the causes of climate change: from large scale temperatures to extreme events  
Gabriele Hegerl is Professor of Climate System Science at the University of Edinburgh. Her research focuses on understanding the causes of observed climate variability and change. This includes changes in precipitation, changes in climate extremes, and temperature over the long historical record and the last two millennia. Gabi is also interested in constraining climate system parameters from observed change, including climate sensitivity and precipitation sensitivity. Gabi has a MS and PhD in applied mathematics, and did her postdoctoral work at the Max-Planck Institute for Meteorology, and the University of Washington. Gabi has published more than 130 papers and has played key roles in three recent IPCC Assessments. She is PI on an ERC Advanced Grant ‘Transition Into the Anthropocene’, which constrains variability and forced response from the past 200 years of observations, is the recipient of the Hans Sigrist prize of the University of Bern, and a fellow of both the American Geophysical Union and the Royal Society of Edinburgh. She also serves as one of the leads on the WCRP grand challenge on weather and climate extremes.
Isabel Cacho Lascorz  
University of Barcelona, Barcelona, Spain: icacho@ub.edu  
9:30 - 10:00 Exploring atmosphere-ocean connections in the Western Mediterranean region during past climatic transitions: last terminations, glacial inceptions and some Holocene key changes

Isabel Cacho is an Associated Professor at the University of Barcelona since 2008. She graduated in Geology in 1992 and earned her PhD in 2000 at the UB. She was affiliated to the University of Cambridge as a post-doctoral researcher from 2000 to 2003 in the Godwin Laboratory. She is a specialist in the application of different geochemical tools for reconstructing past environment conditions mostly based on the analysis of deep marine sediments and also on cave speleothems. She has a strong background in the Mediterranean paleoclimatology. She is also intensively working in the Eastern Equatorial Pacific, reconstructing ocean-atmosphere coupled changes with a particular attention to the carbon cycle. Her current research is very much focused on Mediterranean thermohaline circulation changes in relation to past climate variability in the context of a recently granted ERC-Consolidator grant.

Juan Luis Arsuaga  
Director of the Center for Human Evolution and Behavior; Universidad Complutense de Madrid, Spain: jlarsufe@geo.ucm.es  
10:00 – 10:30 Human Evolution And Climate

Graduate and PhD in Biology by the Madrid (Complutensis) University. Director of the Center for Human Evolution and Behavior (Centro de Evolución y Comportamiento Humanos, Universidad Complutense de Madrid-Instituto de Salud Carlos III). Full professor of Paleontology at the Department of Paleontology (Geology Faculty) of the University of Madrid. Scientific Director of the Human Evolution Museum in Burgos, Spain (Museo de la Evolución Humana). Co-director of the excavations of the Atapuerca sites (Burgos) and Pinilla del Valle sites (Madrid). Foreign Associate of the National Academy of Sciences of the United States. Editor of the archeological and anthropological journal Munibe. Vicepresident of the Atapuerca Fundation. Doctor Honoris Causa for the University of Burgos and for the Politecnic University of Valencia.

Friday, 12th May

Eric Wolff  
Department of Earth Sciences; University of Cambridge, UK: ew428@cam.ac.uk  
9:00 – 9:30 Warm worlds - features and lessons from the Quaternary interglacials

Eric Wolff is a Royal Society Research Professor in the Department of Earth Sciences at Cambridge University. He previously worked at the British Antarctic Survey. After graduating as a chemist, he has studied ice cores from the Antarctic and Greenland for the past 30 years, using them to understand changing climate, as well as changing levels of pollution in remote areas. He also carries out research into the chemistry of the lower parts of the Antarctic atmosphere. He chaired the science committee of the European Project for Ice Coring in Antarctica (EPICA), and co-chairs the international initiative (IPICS) to coordinate future ice core research. His main research goal is to understand the causes of climate evolution over recent glacial cycles. He coordinated the recent interglacials review paper that came out of the PAGES Past Interglacials Working Group.
Hannah Moersberger
Future Earth, Global Hub, Paris, France: hannah.moersberger@futureearth.org
9:30 – 10:00 Future Earth – vision, mission and opportunities

Hannah Moersberger works as a science officer for the Future Earth Secretariat in Paris. In this role, she leads Future Earth’s activities to support early-career professionals and contributes to the Knowledge-Action Networks on Natural Assets as well as the Food-Water-Energy Nexus. Hannah has previously worked on the topic of biodiversity and climate in Africa with the German Development Cooperation (GIZ). She holds a Master’s degree in Environmental Policy from Sciences Po Paris and a Bachelor’s degree in African Studies.

Saturday, 13th May

Ed Brook
Oregon State University, Corvallis, USA: brooke@geo.oregonstate.edu
17:15 – 17:45 New observations of past, fast changes in greenhouse gases

Ed Brook is a Professor in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University. His primary work uses polar ice cores as recorders of past climate change, focusing on the relationship between greenhouse gases and climate on time scales of decades to hundreds of thousands of years, but he occasionally delves into other areas of geochemistry. He received a BS in Geology from Duke University, MS from University of Montana, and PhD from the Massachusetts Institute of Technology and Woods Hole Oceanographic Institution. He was subsequently a NOAA Climate and Global Change Post Doctoral Fellow, working with Michael Bender at the University of Rhode Island. Ed is a recipient of the Aldo Leopold Leadership Fellowship, and a fellow of both the American Geophysical Union and the American Association for the Advancement of Science. He is also active in service to the scientific community, including co-chairing IPICS, participating in numerous advisory groups in the US polar science community, and serving on the PAGES Scientific Steering Committee.

Penélope González Sampériz
Instituto Pirenaico de Ecología, CSIC, Zaragoza, Spain: pgonzal@ipe.csic.es
17:45 – 18:15 Climate Variability, Vegetation Dynamics and Human-Environment Interactions in Continental Mediterranean Iberia During Last Glacial Cycle

Penélope González Sampériz graduated from the University of Zaragoza with a Geography degree in 1994 and a PhD in History in 2001. Her multidisciplinary approach has been essential to her research. She is interested in paleoenvironmental reconstructions, vegetation dynamics and past climate changes, using palynology as the main method. Her work focuses mainly on the study of different types of Quaternary records (from the Late Pleistocene and Holocene) in the Iberian Peninsula, aiming for a realistic reconstruction of vegetation changes and their interaction with climatic and/or anthropogenic variations, always in a multiproxy context. One of the main topics of her research is the study of human-climate interactions in the past, taking into account the influence of abrupt climate changes in patterns of human occupation and migrations, including extinctions and cultural collapses. She is heavily involved in institutional activities and outreach events - she is the leader of the “Outreach Commission of IPE-CSIC” and part of the CMYC Commission (Women and Science in the CSIC), gives talks and workshops in primary and high schools and regularly collaborates with, and considers the implications of, citizens in projects.
### Wednesday 10th May 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Session Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>Mozart Room</td>
<td>From the Mediterranean to the Caspian: paleoclimate variability, environmental responses and human adaptive strategies</td>
</tr>
<tr>
<td></td>
<td>Luis Galve Room</td>
<td>Hydroclimate variability through the ages: Data, models, mechanisms</td>
</tr>
<tr>
<td>11:00</td>
<td>Mariano Gracia Room</td>
<td>Volcanic eruptions: the thread connecting climate records, societal change and future climate projections?</td>
</tr>
<tr>
<td>11:00</td>
<td>Hotel Romareda Room 1</td>
<td>Trace elements and their isotopes as geochemical proxies of past ocean conditions</td>
</tr>
<tr>
<td>11:00</td>
<td>Hotel Romareda Room 2</td>
<td>Regional versus global in past monsoon dynamic: disentangling wind and precipitation proxies</td>
</tr>
<tr>
<td>11:00</td>
<td>Room 11 (Auditorium)</td>
<td>Ice-sheet and sea-level variability during late-Cenozoic warm periods: PALSEA2</td>
</tr>
</tbody>
</table>

**MOZART ROOM**

**Mediterranean to the Caspian: paleoclimate variability, environmental responses and human adaptive strategies**

*Conveners: A. Moreno, W. Fletcher, V. Vaylan; Chairs: D. Veres, S. Anderson*

11:00 **INVITED TALK**

**D. L. Hoffmann; M. Rogerson; M. Luetscher; C. Spötl; M. Mansoura; B. Mauz; N. Kallel**

North African humid phases during the last 500 ka

11:15 **M. Rogerson; Y. Dublyanski; D. Hoffmann; M. Luetscher; C. Spötl**

Speleothem fluid inclusions show westerly and easterly moisture advection across North East Libya during MIS 3 humid phases

11:50 **A. Persoiu; I. Persoiu; F. Mătău**

Climatic and environmental conditions during the neolithization of the Carpathian Mts.

11:45 **E. Regattieri; G. Zanchetta; I. Isola; R.N. Drysdale; P. Bajo; J. C. Hellstrom; B. Wagner; C. Boschi**

A speleothem record of MIS 9/ MIS 8 climate and environmental variability from Macedonia (F.Y.R.O.M.)

12:00 **L.A. Hayles; C.C. Ummenhofer; M. Barriendos; G.H. Schleser; G. Helle; M. Leuenberger; E. Gutiérrez; E.R. Cook**

400 years of summer hydroclimate from stable isotopes in Iberian trees

12:15 **M. Morellon; J. Vegas; F. S. Anselmetti; G. Sinopoli; M. Marchegiano; A. García-Arnay; L. Sadori; Y. Sánchez-Moya; B. Wagner; B. Brushulli; A. Pambuku; D. Ariztegui**

The interplay of climate change and human activity in the central Mediterranean region during the last millennia: the varved, multiproxy record of Lake Butrint (Albania)

12:30 **P. Montagna; N. Tisnerat-Laborde; E. Douville; E. Pons-Branchu; C. Colin; G. Siani; Q. Dubois-Dauphin; Marco Taviani**

Deep-water coral geochemistry reveals large changes in ventilation of the Mediterranean intermediate waters during the holocene

12:45 **F. Sierro; D. Hodell; N. Andersen; B. Ausin; J. Flores; F. Jimenez-Espejo; A. Bahr; F. J. Hernandez-Molina**

Millennial and astronomically-driven changes in the speed of Mediterranean Outflow along the last 250 Kyr near the Strait of Gibraltar
Wednesday 10th May 2017

15:00  INVITED TALK  F. Di Rita; G. Margaritelli; F. Lirer; S. Bonomo; A. Cascella; F. Florindo; P. Conrad Lurcock; M. Vallefuoco; R. Rettori; D. Magri
A high-resolution marine record of vegetation and climate changes from Central Italy during the last five millennia

15:15  J. Aranbarri; P. González-Sampériz; B. Valero-Garcés; A. Moreno; C. Sancho; G. Gil-Romera; M. Bartolomé; M. Alcolea; Mª J. González-Amuchastegui; C. Arenas; M. Leunda; D. Magri
Vegetation dynamics and hydrological response to Holocene climate variability in the Iberian Range: a synthesis from lacustrine and tufa records

15:30  G. Jimenez Moreno; J. Camuera; M.J. Ramos-Román; A. García-Alix; J.L. Toney; R.S. Anderson; F. Jiménez-Espejo; D. Kaufman; J. Bright; D. Sachse
Orbital- and millennial-scale environmental and climate changes in the Mediterranean area during the middle and late Quaternary: a new sediment record from el Padul, Sierra Nevada (S Spain)

15:45  R.S. Anderson; G. Jiménez-Moreno; A. García-Alix; F. Jiménez- Espejo; J. Toney; M. Ramos-Román; J. Carrión; C. Pérez-Martínez; M. Hernández-Corbalán
Holocene Paleoenvironmental Change in the Sierra Nevada, Southern Spain

16:00  A. Miebach; C. Chen; T. Litt
High lake levels - sparse vegetation: palynological insights into the paleoenvironment of the southern Levant during MIS 2

16:15  E. Messager; S. Joannin; C. Leroyer; A. Ali; O. Peyron; A. Cromartie
The delayed expansion of forests in Southern Caucasus

16:30  I. Mudryk; P.J. Mudie
Palynology and paleoecological interpretation of Core 38, Palaeo-Dneister valley, Northwestern Black Sea: initial results of pollen, dinocyst and NPP studies

16:45  S. Nandini
Past and future impact of North Atlantic teleconnection patterns on the hydroclimate of the Caspian catchment area in CESM1.2.2 and observations
Wednesday 10th May 2017

LUIS GALVE ROOM

Hydroclimate variability through the ages: data, models and mechanisms

Conveners: M. Prange, N. Scroxton, M. Mohtadi, S. Steinke and H. Roop
Chairs: N. Scroxton, M. Prange

11:00

N. Abram; B. Ellis; B. Dixon; W. Hantoro; Ch. Shen
Indian Ocean Dipole variability during the last millennium

11:15

M. Higley; J. Conroy; S. Smitt
Last millennium meridional shifts in hydroclimate in the central tropical Pacific

11:30

T. Bhattacharya; J. Tierney; P. DiNezio
Controls on the evolution of the North American Monsoon since the Last Glacial Maximum

11:45

S. Dee; J. Russell
Reconstructing African Hydroclimate since the Last Glacial Maximum via integrated Climate and Proxy System Modeling

12:00

F. Naughton; S. Costas; S. Gomes; T. Rodrigues; M.F. Sanchez Goni; S. Desprat; C. Bronk Ramsey; H. Renssen; R. Trigo; E. Salgueiro; A. Voelker; F. Abrantes
Coupled ocean and atmospheric changes during the Younger Dryas in Central Western Iberia

12:15

R. Da Costa Portilho Ramos; C. Chiessi; Y. Zhang; S. Mulitza; M. Kucera; M. Siccha; M. Prange; A. Paul
Coupling of equatorial Atlantic surface stratification to glacial shifts in the tropical rainbelt

12:30

Y. Zhang; C. Chiessi; X. Zhang; S. Mulitza; M. Prange; A. Sawakuchi; A. Govin; G. Wefer
Impact of millenial-scale Atlantic meridional overturning circulation changes on tropical South American climate

12:45

P. Valdes; R. Ivanovic; L. Gregoire
The role of resolution in simulating past hydrological cycle

"Lunch time (Multiusos room/Lunch Area)"

15:00

C. Gonzalez; A. Boom; C. Montes; C. Huguet; C. Orejuela; R. E. Lozano; D. A. Ayala; S. Archila
Paleo-ENSO during the last glacial period inferred from tropical subandean ecosystems

15:15

E. Moreno Chamarro; D. McGee; B. Green; J. Marshall
Hemispherically asymmetric trade wind changes as signatures of past ITCZ shifts

15:30

B. Konecky; D. Noone; P. Di Nezio; J. Musbaumer; B. Otto-Bliesner; K. Cobb
Fingerprinting tropical hydroclimate change during the Last Glacial Maximum

15:45

W. Roberts; P. Valdes; J. Singarayer
Can glacial precipitation changes in the Tropics be related to the global scale?

16:00

J. Moerman; N. Levin; R. Potts; A. K. Behrensmeyer; A. Deino; B. Passey; N. DeLuca; S. Lehmann
Triple oxygen isotopes in carbonate sediments: Insights on East African water balance since 500 ka

16:15

K. Sniderman; J. Woodhead; J. Hellstrom; R. Drysdale; J. Brown; K. Lorbacher; R. Maas; M. Meinshausen
Palaeodata and model simulations suggest that projected subtropical drying may be a transient response to warming

16:30

N. Burlis; A. Fedorov
Wetter subtropics in a warmer world

16:45

J. Russell; H. Vogel; S. Bijaksana; M. Melles; Towuti Drilling Project Science Team
Orbital-scale variations in Indo-Pacific hydroclimate during the mid- to late Pleistocene from Lake Towuti, Indonesia
<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>M. Toohey; M. Sigl</td>
<td>eVolv2k: A new reconstruction of major volcanic stratospheric sulfur injections and associated aerosol optical depth perturbations, 500 BCE-1900 CE</td>
</tr>
<tr>
<td>11:15</td>
<td>A. Burke; M. Sigl; K. Moore; D. Nita; J. Adkins; G. Paris; J. McConnell</td>
<td>High-resolution sulfur isotopes in ice cores identify large stratospheric eruptions</td>
</tr>
<tr>
<td>11:30</td>
<td>A. N. Legrande; K. Tsigaridis; S. Bauer</td>
<td>Chemistry modulations of large volcanic events of the last millennium</td>
</tr>
<tr>
<td>11:45</td>
<td>P. Abbott; S. Davies; A. Griggs; A. Bourne</td>
<td>Tracing Marine Cryptotephras in the North Atlantic during the Last Glacial Period</td>
</tr>
<tr>
<td>12:00</td>
<td>A. Bourne; S. Davies; P. Abbott; A. Svensson</td>
<td>The Greenland Ice-Core Tephra Record insights into Icelandic eruptive history between 25 and 50 ka BP.</td>
</tr>
<tr>
<td>12:15</td>
<td>M. Khodri; Z. Davide; T. Claudia</td>
<td>The Model Intercomparison Project on the climatic response to volcanic forcing (VolMIP)</td>
</tr>
<tr>
<td>12:30</td>
<td>C. Timmreck; M. Toohey; M. Bittner; J. Jungclaus; S. Lorenz; H. Schmidt; M. Sigl; D. Zanchettin</td>
<td>Sensitivity of simulated 19th century climate to volcanic forcing uncertainties</td>
</tr>
<tr>
<td>12:45</td>
<td>A. Winter; R. Vieten; D. Zanchettin; D. Scholz; D. Black; A. Rubino</td>
<td>New evidence for persistent drying in the tropics linked to natural forcing</td>
</tr>
</tbody>
</table>

"Lunch time (Multiusos room/Lunch Area)"

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td>T. Wozniak</td>
<td>Medieval written sources of volcanic eruptions, A. D. 600-1100</td>
</tr>
<tr>
<td>15:15</td>
<td>L. Schneider; J. E. Smerdon; F. Pretis; C. Hartl-Meier; J. Esper</td>
<td>An independent record of large volcanic events over the past millennium from reconstructed summer temperatures</td>
</tr>
<tr>
<td>15:30</td>
<td>F. Ludlow; C. Gao; A. Matthews; A. Stine; A. Robock; Y. Pan; M. Sigl</td>
<td>Volcanic Eruptions as Historical Actors in Chinese Dynastic Collapse</td>
</tr>
<tr>
<td>15:45</td>
<td>F. Lavigne; B. Wahyu Mutaqin; K. Boilot-Airaksinen; L. Handayani; N. Hananto; Y. Sudrajat; H. Hiden; C. Virmoux; J. C. Komorowski; I. Pratomo; D. Sri Hadmoko; E. de Bélizal</td>
<td>How strong are the environmental and societal impacts of major stratospheric eruptions at the local scale? Case study of the AD 1257 eruption of Samalas Volcano in Lombok, Indonesia</td>
</tr>
<tr>
<td>16:00</td>
<td>M. Bauch</td>
<td>The flagellants, the volcano and malign weather conditions of the 1250s</td>
</tr>
<tr>
<td>16:15</td>
<td>S. Ebert</td>
<td>and there came hail and fire mixed with blood. Volcanic impacts and early medieval cultural responses</td>
</tr>
<tr>
<td>16:30</td>
<td>K. Kleemann</td>
<td>Lifting the Fog of Ignorance: The Icelandic Laki Fissure Eruption of 1783</td>
</tr>
<tr>
<td>16:45</td>
<td>A. Robock; J. Slawinska</td>
<td>Volcanic Eruptions as the Cause of the Little Ice Age</td>
</tr>
</tbody>
</table>
Wednesday 10th May 2017

HOTEL ROMAREDA-ROOM1
Trace elements and their isotopes as geochemical proxies of past ocean conditions
Conveners: C. Jeandel, R. Anderson, S. Little, T. Marchitto and D. Sigman
Chairs: C. Jeandel, R. Anderson, S. Little, T. Marchitto

11:00  C. Jeandel; R. Anderson
GEOTRACES Intermediate Data Products: good tools for modern and paleo oceanography

11:15  Y. Wu; S. Goldstein; L. Pena; A. Hartman; M. Rijkenberg; H. de Baar
A Critical Test of Neodymium Isotopes as a Paleocirculation Proxy in the Southwest Atlantic

11:30  INVITED TALK K. Tachikawa
The large-scale evolution of neodymium isotopic composition in the global modern and Holocene ocean revealed from seawater and archive data

11:45  INVITED TALK J. Yu
Investigation of past nutrient and carbon cycles using benthic foraminiferal proxies

12:00  J. Gottschalk; A. Schmittner; H. B. Bostock; O. Cartapanis; W. B. Curry; H. L. Filipsson; E. D. Galbraith; J. C. Hergueria; S. L. Jaccard; L. Lisicki; D. C. Lund; G. Martinez-Mendez; J. Lynch-Stieglitz; A. Mackensen; E. Michel; A. C. Mix; D. W. Oppo; C. D. Peterson; E. L. Sikes; H. J. Spero; and Claire Waelbroeck
Comprehensive comparison of bottom water dissolved inorganic carbon 13C and epibenthic foraminifer 13C in the global ocean: a test of the canonical one-to-one relationship

12:15  INVITED TALK T. Horner; S. Eltgroth; G. Henderson; R. Rickaby; J. Adkins
Reconstructing ocean circulation using paired measurements of Cd/Ca and Cd-isotopic compositions of deep-sea corals

12:30  INVITED TALK C. Hayes
Contrasting protactinium regimes between the North Pacific and the North Atlantic

12:45  H. C. Ng; L. Robinson; J. McManus; K. Mohamed Falcon; A. Jacobel; G. Henry; T. Chen
Controls of 231Pa/230Th in the Atlantic Ocean both today and in the past

HOTEL ROMAREDA-ROOM1
Palaeoenvironments of Africa: Pliocene to Present
Conveners: A. S. Carr, B. M. Chase, J. Just and M. H. Simon
Chairs: A. S. Carr, B. M. Chase, J. Just and M. H. Simon

15:00  INVITED TALK T. Johnson; J. Votava; R. Hecky
What’s so hot about the carbonate record in Lake Kivu?

15:15  F. Schaebitz; A. Asrat; H. F. Lamb; M. H. Trauth; V. Foerster; C. Günter; F. Viehberg; H. M. Roberts; M. S. Chapot; M. J. Leng; J. R. Dean; A. Deino
The Chew Bahir record: half a million years of environmental history from southern Ethiopia

15:30  R. Lupien; J. Russell; I. Castañeda; C. Campisano; A. Cohen
Leaf wax biomarker reconstruction of Pliocene hydrological variation during Australopithecus afarensis evolution in Afar, Ethiopia

15:45  A. Crocker; A. M. Jewell; R. E. Kretsis James; T. Westerholm; U. Röhl; R. H. James; C. P. Osborne; D. J. Beerling; P. A. Wilson
Mega Green Sahara Periods? Evidence for and drivers of prolonged intervals of North African humidity in the Late Pliocene and Early Pleistocene

16:00  Y. Garcin; G. Ménot; P. Deschamps; E. Schefuß; D. Sachse; G. de Saulieu; D. Sebag; R. Oslisly; L. Dupont; B. Brademann; R. Tjallingii; A. Brauer
Hydroclimate and vegetation changes in Central Africa during the Holocene: new views from the Lake Barombi Mbo (Cameroon)

16:15  M- Chevalier; B. Chase
Quantified 45,000 years-long temperature and precipitation reconstructions in southeast Africa

16:30  T. Haberzetl; M. Wündsch; T. Kasper; R. Mäusbacher; H. Cawthra; G. Daut; P. Frenzel; K. Kirsten; L. Quick; M. Zabel; M. Meadows; RAaN-science team
Holocene paleoenvironmental change and sea level variations in South Africa

16:45  C. Ogola; J. Lejju ; E. Ndiema; E. Kyazike
Archaeology and Paleo-environments of Kakapel Rock art site, western Kenya
### HOTEL ROMAREDA-ROOM2

**Regional versus global in past monsoon dynamic: disentangling wind and precipitation proxies.**

*Conveners: C. Kissel, F. Bassinot, Z. Jian and B. Malaizé*

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>C. Tabor; B. Otto-Bliesner; E. Brady; R. Feng; J. Nusbaumer; J. Zhu; CESM Isotope Tracer Development Group</td>
<td>Understanding 18O Variability in Monsoon Regions Using an Earth System Model</td>
</tr>
<tr>
<td>11:15</td>
<td>C. Kissel; Q. Chen; Z. Liu</td>
<td>Deciphering detrital signatures of precipitation/weathering and wind transport related to the East Asian monsoon fluctuations: multi-proxy study of a long marine sequence from the northern part of the South China Sea</td>
</tr>
<tr>
<td>11:30</td>
<td>S. K. Adukkam; Veedu B. N. Nath; S. Clemens; S. M. Ahmad; S. M. Gupta; A. Aldahan; G. Possnert; N. Lathika</td>
<td>Late Quaternary record of changes in the planktonic foraminiferal abundance in the north to south transect of the Andaman Sea: inferences on monsoon climate</td>
</tr>
<tr>
<td>11:45</td>
<td>D. Zoura; D. Hill; A. Dolan; A. Haywood</td>
<td>Influence of CO2, the Antarctic Ice Sheet and Asian Topography on the Asian Monsoon and Regional Moisture Availability</td>
</tr>
<tr>
<td>12:00</td>
<td>J. Lee; B. K. Khim; S. Kim; H. Goo Cho</td>
<td>Long-term variation of clay mineral compositions in the Andaman Backarc Basin since the late Miocene</td>
</tr>
<tr>
<td>12:15</td>
<td>C. Zorzi; M. F. Sanchez Goñi; K. Anupama; S. Prasad; V. Ihanquez; J. Johnson; L. Giosan</td>
<td>Indian monsoon variations during three contrasting climatic periods: the Holocene, Heinrich Stadial 2 and the last interglacial-glacial transition</td>
</tr>
<tr>
<td>12:30</td>
<td>J. Kim; B. K. Khim Khim; M. Ikehara; J. Lee</td>
<td>Monsoon-induced denitrification change in the Eastern Arabian Sea during 1 Ma (IODP Exp. 355 Site U1456)</td>
</tr>
<tr>
<td>12:45</td>
<td>P. Le Mézo; L. Bopp; P. Braconnot; W. Hardy; M. Kageyama</td>
<td>African monsoons dynamics and marine productivity off the Congo River mouth, a model-data comparison perspective</td>
</tr>
</tbody>
</table>

### HOTEL ROMAREDA-ROOM2

**The climate record of the past 5 million years: from the seasonal cycle to Ice Ages.**

*Conveners: G. Philander, N. Burls, A. Fedorov, P. deMenocal and C. Ravelo
Chairs: A. Fedorov, N. Burls*

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td>INVITED TALK Z. Liu</td>
<td>The Holocene Global Temperature Conundrum, When Models Meet Data</td>
</tr>
<tr>
<td>15:15</td>
<td>INVITED TALK M. Latif</td>
<td>From the Last Interglacial to the Anthropocene: Modeling a Complete Glacial Cycle with Comprehensive Earth System Models (PalMod)</td>
</tr>
<tr>
<td>15:30</td>
<td>G. Philander</td>
<td>The precarious present: Is global warming reversing an incipient Ice Age?</td>
</tr>
<tr>
<td>15:45</td>
<td>J. Tierney</td>
<td>Reassessing Pliocene temperature gradients</td>
</tr>
<tr>
<td>16:00</td>
<td>A. Fedorov; N. Burls; K. Lawrence; L. Peterson</td>
<td>The tight link between oceanic meridional and zonal SST gradients: implications for the Pliocene climate and glacial cycles</td>
</tr>
<tr>
<td>16:15</td>
<td>Z. Song; M. Latif; W. Park; U. Krebs-Kanzow; B. Schneider</td>
<td>Influence of Seaway Changes during the Pliocene on Tropical Pacific Climate in the Kiel Climate Model: Mean Sate, Annual Cycle, ENSO, and their Interactions</td>
</tr>
<tr>
<td>16:30</td>
<td>Z. Lu; Z. Liu; G. Chen</td>
<td>Simulating ENSO evolution of the last 300,000 years: precessional modulation of ENSO variance and seasonal phase-locking</td>
</tr>
<tr>
<td>16:45</td>
<td>P. Jardine; W. Fraser; B. Lomax; M. Sephton; T. Shanahan; C. Miller; W. Gosling</td>
<td>Pollen and spores as biological recorders of past ultraviolet irradiance</td>
</tr>
</tbody>
</table>
# Wednesday 10th May 2017

**ROOM 11 AUDITORIUM (BASEMENT)**

Ice-sheet and sea-level variability during late-Cenozoic warm periods: PALSEA2

*Conveners: A.Carlson, A. Dutton, A.Long and G. Milne*

*Chairs: A. Carlson*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td><strong>M. Latinovic; V. Klemann; M. Thomas</strong></td>
</tr>
<tr>
<td></td>
<td>Sea-level indicators as proxy data for relative sea-level change</td>
</tr>
<tr>
<td>11:15</td>
<td><strong>L. Vetter; H. Spero</strong></td>
</tr>
<tr>
<td></td>
<td>Reconstructing oxygen isotope heterogeneity of Laurentide Ice Sheet meltwater during Termination I</td>
</tr>
<tr>
<td>11:30</td>
<td><strong>H. Bervid; A. Carlson; I. Hendy; M. Walczak; J. Stoner</strong></td>
</tr>
<tr>
<td></td>
<td>Deglacial sea-surface temperature change and rapid response along the western margin of the northern and southern Cordilleran ice sheet</td>
</tr>
<tr>
<td>11:45</td>
<td><strong>B. Keisling; R. DeConto</strong></td>
</tr>
<tr>
<td></td>
<td>Reconstructing Greenland Ice Sheet Dynamics during the Last Deglaciation</td>
</tr>
<tr>
<td>12:00</td>
<td><strong>A. Glueder; A. C. Mix; G. A. Milne; B. Lecavalier; B. Reilly; J. Clark; C. Holm; J. Padman; A. Ross; S. John</strong></td>
</tr>
<tr>
<td></td>
<td>Improving relative sea-level reconstructions in northern greenland from marine bivalves with stable isotope data; implications for ice history and gia models</td>
</tr>
<tr>
<td>12:15</td>
<td><strong>B. Mauz; Z. Shen; G. Spada</strong></td>
</tr>
<tr>
<td></td>
<td>Sea-level proxy records: Are they good enough to reconstruct small-scale jumps?</td>
</tr>
<tr>
<td>12:30</td>
<td><strong>J. Blasco Navarro; J. Álvarez Solas; A. Robinson; M. Montoya</strong></td>
</tr>
<tr>
<td></td>
<td>Antarctic Ice Sheet sensitivity to oceanic temperature changes</td>
</tr>
<tr>
<td>12:45</td>
<td><strong>B. Otto-blesner; M. Loverstrom; W. Lipscomb; J. Fyke; S. Marshall; W. Sacks</strong></td>
</tr>
<tr>
<td></td>
<td>Coupled Long-Term Evolution of Climate and the Greenland Ice Sheet During Past Warm Periods: A Comparison for the Last Interglacial and the Late Pliocene</td>
</tr>
</tbody>
</table>

## POSTER SESSION 17:00 – 19:00

**HIPOSTILA ROOM**

### MED

1. R. Cheddadi; C. Khater
   - Climate change since the last glacial period in Lebanon and the persistence of Mediterranean species

2. D. Semikolennikov; T. Yanina; E. Ignatov; K. Arslanov
   - Paleogeography of Kher Schraft during the Late Pleistocene – Holocene

3. M. C. Trapote; V. Rull; T. Vegas - Vilarrubia
   - Climatic & anthropogenic drivers of past ecological dynamics in lake Montcortes (Iberian Peninsula)

4. T. Bardají; A. Cabero; E. Roquero; C. Zazo; J. Lario; C. J. Dabrio; J. L. Goy; Mº J. Machado; N. Mercier; P. G. Silva; A. Martinez-Grafa
   - Climatic variability in western Mediterranean during the last glacial cycle (ca.130-14kyBP): evidences from an island setting (Formentera, Balearic Is., Spain).

5. N. V. Esin; N. Igorevich Esin
   - Dynamics of vertical tectonic movements during the Holocene

6. H. Laermans; D. Kelterbaum; M. Elashvili; S. Matthias May; S. Opitz; D. Hüle; J. Verheul; H. Brückner
   - Holocene coastal and palaeoenvironmental evolution in the surroundings of the Rioni Delta (Kolkheti lowlands, W Georgia)

7. C. Pérez-Meijas; A. Moreno; C. Sancho; H. Stoll; I. Cacho; H. Cheng; L. Edwards
   - High frequency hydrological variability since last glacial inception: the speleothem record of Ejulve Cave, NE Iberia

8. I. Unkel; I. Schwick; A. Haug
   - Environmental change during the LBA-EIA-transition in S-Greece: climate forcing and human contribution

9. F. Marret; P. Mudie; K. Mertens; L. Shumilovskikh; S. Leroy
   - Atlas of modern dinoflagellate cyst distribution in the Black Sea Corridor
Wednesday 10th May 2017

10
M. Rogerson; M. Mansoura; B. Mauz; M. Ouaja; D. Hoffmann; N. Elmedjoub; Y. Jedoui; N. Kallel; M. Luetscher; K. Regaya; K. Rosewell; C. C. Spötl
Climate Change across the northern boundary of the Sahara: A review of the Quaternary in Tunisia

11
S. Miko; N. Ilijanic; O. Hasan; G. Papatheodorou; I. Razum; D. Brunovic; K. Bakrac; V. Hajek Tadesse; M. Sparica Miko
Paleoenvironmental archives of the submerged karst landscapes of the Eastern Adriatic

12
N. Ilijanic; S. Miko; O. Hasan; V. Hajek Tadesse; D. Brunovic
Pedological response to the dynamics alteration in environment of the Lover Volga region in the last macrocycle.

13
G. Furlanetto; C. Ravazzi; M. Brunetti; R. Comolli; M. De Amicis; V. Maggi; R. Pini; P. Vallé
Improving quantitative reconstructions of climate parameters and long-term Holocene pattern in an high-alpine peat bog subjected to heavy oceanic outbursts (outer Italian Alps)

14
M. Alcolea Gracia; C. Mazo; R. Piñe; L. Montes; R. Domingo; A. Obón; A. Berdejo; P. Utrilla
Human-forest interactions in central pre-pyrenees (ne spain) during early-mid holocene transition. Charcoal analysls in archaeological contexts.

15
S. Bagrow; A. Makeev; A. Rusakov; T. Yanina; R. Kurbanov
The Kuban River Delta Holocene stratigraphy (grain size analysis)

16
N. Tkach; A. Sean Murray; T. Yanina; R. Kurbanov
OSL-chronology of Caspian depression paleogeographic evolution in Late Pleistocene

17
N. Tyunin; V. Dikarev; D. Semikolenymkh; T. Yanina
The Uralian Holocene environmental evolution

18
K. Penkman; R. Prece; S. Parfitt; T. Meijer; N. Limondon-Lozou; A. Tesakov
Clay minerals in Late Quaternary Caspian Sea sediments

19
E. Badyukova
Baery knolls - unusual landforms in the Northern Caspian Plain

20
T. Yanina; H. Bolikhovskaya; M. Lychagin; A. Svitoch
Evolution of the Volga river delta during Holocene

21
G. Margaritelli; F. Lirer; F. Di Rita; D. Magri; L. Capotondi; S. Bonomo; I. Cacho; A. Cascella; R. Rettori; M. Vallefuoco
Paleoclimatic reconstructions from marine records of central and western Mediterranean area over last five millennia using planktonic foraminifera

22
M. Jones; G. Rollefson; T. Richter; V. Rowan; A. Wasse
Postglacial interactions between climate, vegetation, land use and fire dynamics in Northern Greece

23
J. Camuera; G. Jiménez-Moreno; M. J. Ramos-Román; A. García-Alíx; F. Jiménez-Espejo; J. L. Toney; R. Scott Anderson; D. Kaufman; J. Bright; D. Sachse
High-resolution multiproxy study of the Last Glacial Maximum (LGM) and deglaciation from the Padul peat bog (southern Iberian Peninsula)

24
P. González-Sampériz; M. Leunda; G. Gil-Romera; A. Moreno; J. Aranbarri; B. Oliva-Urcia; M. Morellón; J. P. Corella; B. L. Valero-Garcés
High-resolution-human-environment interactions as trigger of the current central pyrenees landscape: a history from lake records

25
A. Munoz; A. Entrena; A. Pérez; A. Munoz; A. Luzmón; J. M. Mayayo; A. Yuste; M. A. Soriano
Osteological evolution of the Middle Martin Valley (NE Spain) during the Late Pleistocene-Holocene and its relation to climate changes.

26
J. N. Pérez Asensio; I. Cacho; J. Frigola; L. D. Pena; F. J. Sierr; A. Asioli; J. Kuhlmann; K. Huhn
Late glacial to Holocene western Mediterranean paleoclimate variability and its impact on deep and intermediate water circulation

27
F. Franco Múgica; A. J. Moores; P. González Sampériz; A. C. Stevenson
Full glacial vegetation history in high-elevation Sierra Nevada from Southern Spain.

28
J. N. Pérez Asensio; I. Cacho; J. Frigola; L. D. Pena; F. J. Sierr; A. Asioli; J. Kuhlmann; K. Huhn
Late glacial to Holocene western Mediterranean paleoclimate variability and its impact on deep and intermediate water circulation

29
F. Lirer; G. Margaritelli; S. Bonomo; A. Cascella; R. Rettori
Paleoclimatic reconstructions from marine records of central and western Mediterranean area over last five millennia using planktonic foraminifera

30
M. Jones; G. Rollefson; T. Richter; V. Rowan; A. Wasse
The vegetation and fire history in southern Spain during the Holocene based on a high-resolution lacustrine record from the Laguna de Medina, Cádiz

31
M. Leunda; C. Sancho; M. Bartolomé; Á. Belmonte; Ríbas; D. Gómez; G. Gil-Romera; A. Moreno; B. Oliva-Urcia; P. González-Sampériz
The last ice caves of western Mediterranean mountains and its potential for palaeoenvironmental reconstructions: an announced disappearance in the Pyrenees

32
D. Veres; A. Timar-Gabor; I. Obrecht; U. Hambach; C. Zeeden; J. Bosken; V. Anechitei-Deacu; S. Markovic; F. Lehmkuhl
Lower Danube loess and millenial-scale paleoclimate changes: new approach, new outcome and new perspectives

33
E. Irarte; V. Matiez-Pillado; J. A. López-Sáez
Integrating Holocene RCP geochronological proxies and archaeological cultural changes in the northern Plateau of the Iberian Peninsula: the Villafáfila lagoon and Sierra de Atapuerca speleothems

34
J. Van 't Hoff; T. Schröder; K. Reichert; M. Melles
Extending tree-ring chronologies in the Northern Caucasus for paleoclimatic and historical purposes

35
M. Bartolomé Úcar; A. Moreno; C. Sancho; Á. Belmonte; E. Irarte; I. Cacho; H. Stoll; R. L. Edwards; H. Cheng
Climate variability inferred from several speleothems in Central Pyrenees during MIS 3, Lateglacial and Holocene (Las Gloces Cave)

36
M. Leunda; C. Sancho; M. Bartolomé; Á. Belmonte; D. Gómez; G. Gil-Romera; A. Moreno; B. Oliva-Urcia; P. González-Sampériz
Climate Change across the northern boundary of the Sahara: A review of the Quaternary in Tunisia

37
D. Wolf; D. T. Kolb; M. Alcaraz-Castano; R. Calvo; J. Sierro; A. Asioli; J. Kuhlmann; K. Huhn
Postglacial interactions between climate, vegetation, land use and fire dynamics in Northern Greece

38
D. Wolf; D. T. Kolb; M. Alcaraz-Castano; R. Calvo; J. Sierro; A. Asioli; J. Kuhlmann; K. Huhn
Postglacial interactions between climate, vegetation, land use and fire dynamics in Northern Greece

39
T. Vadsaria; G. Ramstein; L. Li; J. C. Dutay
Clay minerals in Late Quaternary Caspian Sea sediments

40
E. Badyukova
Extending tree-ring chronologies in the Northern Caucasus for paleoclimatic and historical purposes

41
M. Bartolomé Úcar; A. Moreno; C. Sancho; Á. Belmonte; E. Irarte; I. Cacho; H. Stoll; R. L. Edwards; H. Cheng
Climate variability inferred from several speleothems in Central Pyrenees during MIS 3, Lateglacial and Holocene (Las Gloces Cave)
Wednesday 10th May 2017

40 A. Oflaz; W. Dörfler; M. Weinelt
Review of “The Beyşehir Occupation Phase”: possible marker assemblage pollen zone for the biostratigraphic division of the Late Holocene in the Eastern Mediterranean or not?

41 A. García Arnaiz; M. Morellón; J. Vegas; A. Moreno; Y. Sánchez-Moya; E. Bellido; F. S. Anselmetti; D. Ariztegui
Development of a precise age-depth model for the varved record of Lake Butrint (Albania): a reconstruction of environmental change in the central Mediterranean region during the last millennium

42 M. El Ouahab; A. Hubert-Ferrari; V. Karabacak; S. Schmidt; N. Fagel
Lacustrine clay mineral assemblages as a proxy for land-use and climate changes over the last 4 kyr: The Amik Lake case study, Southern Turkey

43 E. Russo; A. Grabundzija
Climate Trends Changing Threads in the Prehistoric Fannonian Plain

44 M. Alcolea Gracia; V. Sauqué; C. Mazo; G. Cuenca-Bescós
Re-dermal landscape south of the ebro river. First results from the late pleistocene (mis3) site of aguilón p5 cave (zaragoza, spain)

45 C. Zielhofer; W. J. Fletcher; S. Mischke; M. De Batist; J. F. E. Campbell; S. Joannin; A. Junginger; B. Schneider; N. El Hamouti; A. Minkad; T. Lauer
Atlantic forcing of Western Mediterranean winter rain minima during the last 12,000 years

46 Y. Dixit; S. Toucanne; L. Bonnin; C. Fontanier; A. Tripati; G. Jouet
Rainfall Variability in the North-Central Mediterranean during MIS7 and MIS5: New insights for sapropel deposition

VOLC

121 C. Gao; Y. Gao; C. Shi
Climate Aftermath of the 1815 Tambora Eruption in China, and the Role of Eruption Season

122 P. Harvey; S. Grab; F. Engelbrecht
Volcanic Forcing: New Initiatives to Establish its Impacts on Climates of the Southern Hemisphere

123 J. Picus; S. Grab; R. Allan
Linking explosive 19th century volcanoes with wild storms over southernmost Africa: a case of cause and effect or mere coincidence?

124 D. Rus
The effects of the eruption of the Laki volcano in Transylvania

125 A. Seddon; M. Jokelrud; J. Birks; V. Vandvik; R. Willis

126 S. Guillet; C. Corona; M. Stoffel; M. Khodri; F. Lavigne; P. Ortega; N. Eckert; O. Churakova Sidorova; M. Beniston; V. Masson-Delmotte; C. Oppenheimer
Re-assessing the climatic impacts of the 1257 eruption in Europe and in the Northern Hemisphere using historical archives and tree rings

127 M. Gurskaya
Estimation of volcanic explosivity index (VEI) by light rings in larches from northern Siberian forest tundra

128 L. Marshall; A. Schmidt; K. Carslaw; M. Toohey; G. Mann; M. Mills; J. F. Lamarque; F. Tummon; S. Tilmes; S. Dhomse; D. Zanchettin; M. Khodri
Multi-model comparison of the volcanic sulfate deposition from the 1815 Mt. Tambora eruption

129 D. McLean; P. Albert; T. Nakagawa; T. Suzuki; SG14 Project Members; V. Smith
An integrated Holocene tephrerstratigraphy for East Asia: A high-resolution cryptotephras study from Lake Suigetsu (SG14 core), central Japan

130 J. L. Fernández-Turriol; F. P. Pérez-Torrado; A. Rodríguez-González; J. Saavedra; C. Marraccedo; R. Rejas; A. Lobo; N. Ratto; N. Osterrieth; W. Baez; J. Gallardo
The tephra deposits of the large 4.2 ka BP Cerro Blanco eruption in the southern Puna, Central Volcanic Zone, Andes

131 M. C. Margot; C. D. Mills; J. F. Lamarque; M. Khodri; G. Mann; L. Marshall; A. Robock; A. Schmidt; C. Timmreck; M. Toohey; F. Tummon; D. Zanchettin
Sources of inter-model variability in the VolMIP-Tambora experiment

132 B. Zambri; A. Robock; A. Schmidt; M. Mills
Modeling Climate Impacts of the 1783-1784 Laki Eruption in Iceland

133 K. Rehfeld; M. Holloway; E. Wolff; L. Sime
Is a cold planet Earth’s climate more sensitive to volcanic forcing than a warm one?

134 F. Gennaretti; D. Huard; M. Naulier; M. Savard; C. Bégin; D. Arseneault; J. Guiot
Impact of volcanism on Fennoscandian Ice Sheet melting during the last deglaciation

135 K. Kuži
Identification of the volcano from the poem Vila Slovinka (Fairy Slav)

136 M. Sigl; S. Brügger; U. Büntgen; A. Eichler; D. Osmont; W. Tinner; M. Schwikowski
Climate, land-use change and fire activity in Central Asia during the past 6,000 years and its relation to volcanic and solar activity

137 P. Albert; V. Smith; E. Tomlinson; T. Suzuki; T. Nakagawa
Trace element characterisation of Japanese tephrerstratigraphic markers: elucidating eruptive histories and facilitating the synchronisation of paleoclimatic archives

138 E. Irigarte; J. Revelles; W. Finsinger; P. Burjachs; G. Alcalde; M. Sanna
The youngest Holocene volcanic eruptions in the Iberian Peninsula: palaeoenvironmental context and possible impacts on early Holocene populations in the Garrotxa region (NE Iberian Peninsula)

139 P. Hopcroft; J. Kandlbauer; P. Valdes; S. Sparks
Reduced cooling in response to future volcanic eruptions

140 I. Feessy; W. Dörfler
Evidence for environmental change at around the Hekla 4 eruption from laminated lake sediments in Northern Germany

141 R. Wilson; R. D’Arrigo; M. Rydval; D. Clayton
The “Ills”: Long-Term Climatic Context for the 1690s Scottish Famine Inferred from Tree Rings
Wednesday 10th May 2017

98 S. Davies; P. Abbott; A. Bourne; M. Chapman; E. Cook; A. Griggs; N. Pearce; A. Svensson; B. Austin
Connecting the records: exploiting tephra deposits to help understand abrupt climate change

99 G. Plunkett; B. Jensen; R. Booth; G. Swindles; A. Blundell; H. Mackay; P. Hughes
Did the AD 854 Mount Churchill trigger societal and climatic impacts in the northern mid-latitudes?

100 L. Shotton; A. Newton; A. Dugmore; J. Stevenson
Environmental Impact of Plinian Eruptions in Iceland

PALSEA

96 R. Barnett; P. Bernatchez; M. Garneau
Salt-marsh testate amoebae as a novel tool for reconstructing regional sea-level changes in eastern Canada

97 N. Barlow; A. Long; R. Gehrels; M. Saher; R. Scaife; H. Davies; K. Fenkenman; D. Bridgland; A. Sparks; C. Smart; S. Taylor
Relative sea-level variability during the late Middle Pleistocene: new evidence from eastern England

98 L. Niu; G. Lohmann; E. Gowen
Influence of climate forcing on the Northern Hemisphere Ice Sheets evolution through the last glacial cycle

99 D. Chandan; R. Peltier
Reconciliation of the Orangeburg Scarp Record for the Influences of an Accurate Pleistocene GIA Correction and Tectonic Uplift

100 G. Sinclair; A. E. Carlson; D. H. Rood
Mountain glacier sensitivity to centennial-scale climate change: a case study from Spitsbergen, Svalbard

101 W. H. Nahm
Holocene sea-level changes in Korea

102 S. Yi; B. Song; W. H. Nahm; J. Y. Lee; J. C. Kim; J. Lim
Holocene relative sea level changes and environmental implications on the west coast of South Korea

103 J. Santisteban; J. F. Mediato; R. M. Mediavilla; B. del Moral; C. J. Dubrio
Influence of Holocene relative sea level variations in the evolution of the Almenara marsh (Castellón, Spain)

OCEAN

155 P. Blasby; J. Lippold; M. Gutjahr; N. Frank; J. M. Link; M. Frank
The evolution of deep water circulation in the subpolar North Atlantic during the last glacial termination

156 Y. Dai; J. Yu; P. deMenocal; O. Hyams-Kaphzan
Salinity effect on Globigerinoides ruber (white) Mg/Ca: A revisit of Atlantic core-tops

157 K. Kubota; K. Shirai; N. Sugihara-Murakami; K. Selke; M. Iotti; K. Tanabe
Bivalve shells as archives of past environmental changes

158 L. Missiaen; S. Pichat; L. Borderi; C. Waelbroeck; E. Douville
Do changes in detrital sources during Heinrich events affect the sedimentary 213Pa/230Th circulation proxy?

159 S. Little; D. Vance; C. Archer; T. Lyons; J. McManus; S. Severmann
Copper isotope signatures in the marine environment governed by complexation to strong organic ligands

160 S. El Meknassi; T. Cardone; G. Dera; V. Chavagnac; M. De Rafélis
Sr isotope composition of modern molluscs shells: Are they a truthful proxy of seawater composition?

161 C. Pelejero; R. Sherrell; S. Puertes; R. Rozdon; A. López-Sanz; A. Gagnon; V. Häussermann; G. Forsterra; E. Calvo
Experimental paleo-proxy calibration in the cold water coral Desmophyllum diaphans

162 R. Bhushan; U. S. Banerji; R. Agnihotri; C. J. Tull
Sulfur Isotopes as a Tracer of Sea level variability

163 C. Colin; Z. Yu; L. Meynadier; E. Douville; K. Tachikawa; P. Bassinot
Seasonal variations in distribution of dissolved neodymium concentrations and εNd in the Bay of Bengal

164 C. Colin; L. Bonneau; Q. Dubois-Dauphin; E. Pons-Branchu; E. Douville; R. Tissier-Laborde; M. Elliot; H. Douarin; F. Mienis; N. Frank; D. Swingedouw
Modern and Holocene hydrological variations of the NE Atlantic inferred from Nd isotopic composition analyzed on seawater and deep-sea corals

165 R. Anderson
Factors that affect sedimentary 213Pa/230Th ratios

166 F. Pöppelmeier; P. Blaser; H. Schulz; M. Gutjahr; J. Lippold; P. Frank
The interaction of authigenic and detrital Nd in North Atlantic sediments

167 L. Matos; C. Colin; N. Frank; C. Wiemberg; D. Hebbeln
Antarctic Intermediate Water intrusion at the Florida Strait related to the last glacial millennial-scale variability

168 K. Allen; B. Hönsich; S. Egging; L. Haynes; Y. Rosenthal; J. Yu
Trace element proxies for surface ocean conditions: A synthesis of culture calibrations with planktic foraminifera

Mollusc shell Mg/Ca ratios measured by Laser-Induced Breakdown Spectroscopy (LIBS) as a future palaeoclimatic proxy

170 M. A. Vara; K. DeLong; A. Herrmann; G. Ouellette; J. Richey
Environmental impact of Plinian Eruptions in Iceland

Connecting the records: exploiting tephra deposits to help understand abrupt climate change

172 K. Costa; J. McManus; R. Anderson; G. Winckler
Deciphering 231Pa/230Th in hydrothermally influenced sediments from the Juan de Fuca Ridge

173 M. Frank
Deciphering Past Ocean Circulation and Water Mass Mixing with Radiogenic Neodymium Isotopes and Rare Earth Elements: Potential and Pitfalls

174 M. Cornuault; K. Tachikawa; L. Vidal; A. Guichou; G. Siani; P. Deschamps; M. Revel
Circulation changes in eastern Mediterranean Sea over the past 23,000 years inferred from authigenic Nd isotopic ratios

175 T. Horner; B. Geyman; J. Ptacek; M. Auro; T. Hill; M. LaVigne
Barium in deep-sea bamboo corals: Phase relationships, stable isotopic distributions, and prospects for paleoceanography

176 R. Sherrell; R. Rozdon; C. Pelejero
Trace metal composition and growth habit of cultured cold-water coral aragonite: proxy calibration experiments

177 S. Chaabane; M. López Correa; F. Montagna; N. Kallel; M. Taviani; C. Linares; P. Ziveri
Geochemical investigation of the Mediterranean red coral (Corallium rubrum) for paleotemperature reconstructions

178 T. Marchitto; B. Rongstad; J. Peekenbacher; H. Spero; A. van Geen
Proof-of-concept for solution-based Mg/Ca on individual planktonic foraminifera: 250 years of ENSO variability
Wednesday 10th May 2017

179  C. González; V. Ramírez; C. Huguet; H. Hernán Tavera; A. Amézquita
Marine and terrestrial signals in surface sediments from the Caribbean and the eastern tropical Pacific: a multiproxy approach

180  E. Garcia-Solsong; I. Cacho; F. Lirer; L. Pena; J. N. Pérez-Asensio; L. Quiros-Collazos
Rare Earth Elements and Nd isotopes as tracers of modern circulation in the central Mediterranean Sea

HYD

154  R. Hanane; M. El Ghachi; Y. El Khalki; A. Roujijati; M. Taciib; F. Thevenon; B. Damanti
Hydroclimatic changes in Middle Atlas (Morocco, Western Mediterranean region), during the late glacial-early Holocene transition based on multiproxy data.

155  C. Nolan; Bryan Shuman; Robert Booth; Stephen Jackson
Using co-located lake and bog paleohydrologic records to improve proxy climate interpretations

152  G. Windler; J. E. Tierney; P. Zander; R. Thunell
Molecular proxy records of the effect of shelf exposure on Indo-Pacific warm pool climate from the past 450,000 years

151  S. Prizomwala; T. Solanki; N. Bhatt
Reconstructing climate signals from fluvial, aeolian and marine sequences of southern Saurashtra during the last 100 ka

150  G. V. Gunjan; Yadav S. P. Prizomwala; T. Solanki; N. Makwana
Dryland fluvial landforms: Reliable archives for reconstructing palaeoclimatic signals?

149  J. I. Santisteban; R. Mediavilla; L. Galán; J. Francisco Mediato; B. del Moral
Palaeohydrological fluctuations for the last 25,000 years as recorded in fluvial sediments of the Guadiana River (central Spain).

148  P. Matthias; R. Rachmayani; M. Schulz; S. Mullita
Astronomical forcing of an exceptionally long North African wet phase during Marine Isotope Stage 11

147  F. Shi; S. Zhao; Z. Guo; H. Goosse
Multi-proxy reconstructions of precipitation field in China over the past 500 years

146  C. Chen; D. McGee; J. Quade
Reconstructions of late Pleistocene precipitation from paleoshorelines of high-altitude, closed-basin lakes in the central Andes

145  I. Bouimetarhan; M. Prange; C. Gonzalez; C. Chiessi; L. Dupont
A new concept for paleohydrological evolution of the Younger Dryas in NE Brazil

144  C. Tozer; A. Kiem; T. Vance; J. Roberts; M. Curran; A. Boy
From Antarctic ice cores to Australia’s climate: Hydroclimate reconstructions using an alternative proxy

143  L. Vidal; G. Leduc; K. Thirumalai
ENSO activity during the last climate cycle using IFA

142  N. Malvyina; A. Erich; T. Barlayeva; T. Papina
Influence of atmospheric circulation on isotopic composition of precipitation in foothill Altai Mountains (Russia)

141  N. Graham; D. Verschuren; K. Georgakakos
Hydrological simulations of the mid-Holocene drying of Megalake Chad

140  J. Singarayavaray; M. Holloway
Insights into late Quaternary tropical hydroclimate dynamics using a water-isotope enabled climate model

139  T. Felis; M. Ionita; N. Rimbu; G. Lohmann; M. Kolling
Extreme aridity and mild temperatures in the Middle East during the late Little Ice Age

138  P. Scussolini; J. Aerts; H. Renssen; P. Bakker; P. Ward; B. van den Hurk; H. Winsemius
The influence of snow cover distribution on alpine floods. An image-satellite snow distribution analysis related with the severest flood episodes of the Hasli-Aare river basin, Berner Oberland (1987-2012)

137  A. Giesche; Y. Dixit; F. Gázquez; C. Petrie; D. Hodell
Quantitative palaeo-aridity record from Karsandi paleolake (NW India) over the Holocene inferred from triple oxygen isotopes in gypsum hydration water

136  V. Grijalba; Gómez G. Vargas; C. Ortega; F. Gonzalez; R. Rondonelli; J. González
Unravelling the exceptional El Niño-driven mudflows and catastrophic floodings of march 2015 at the hyperarid Atacama Desert

135  C. Ortega; G. Vargas; M. Rojas; S. Pantoya; P. Muñoz; C. B. Lange; J. A. Ruttlant; L. Dzeileau; V. Grijalba; F. Gonzalez; L. Ortliab
Extreme ENSO-driven torrential rainfall episodes at the southern edge of the Atacama Desert during the mid-Holocene and its projection for the 21st century

134  Y. Enzel; J. Quade
Limited early Holocene northward shift of the ITCZ and rain belt over Arabia: The Lakes vs. wetlands debate regarding how wet is wet.

133  E. Brisset; E. Brisset; M. Djamali; A. Naderi; K. Tachikawa; D. Borschneck; M. Pourkerman; E. Bard
Late Holocene palaeoclimate variability in south-western Asia highlighted by the Lake Maharouli sediments (Iran) and potential implications for human adaptive strategies

132  P. Cabrera-Medina; L. Schulte; C. Garcia; J. C. Peña; F. Carvalho
The influence of snow cover distribution on alpine floods. An image-satellite snow distribution analysis related with the severest flood episodes of the Hasli-Aare river basin, Berner Oberland (1987-2012)

MON

76  S. Liu; J. Li; X. Shi
Provenance discrimination of siliciclastic sediments in the central Bay of Bengal and their implication for paleoenvironmental records since 42.8 ka

77  J. Nie; G. Carmala; Q. Su; Q. Liu; R. Zhang; D. Beslop; C. Necula; S. Zhang; Y. Song; Z. Luo
Late Miocene onset of dominant 100,000 year East Asian summer monsoon cycles

78  S. Chawchai; H. C. Wang; L. Löwemark; A. Chabangborn; B. Wohlfarth; X. Y. Jiang; H. C. Li; R. Uemura; L. Guangxin; X. Wang; L. Tan; C. C. Shen
Instant responses of Indian Ocean monsoon to high-latitude northern Atlantic during the Younger Dryas
Wednesday 10th May 2017

1. A. Bory; C. Skonieczny; V. Bout-Roumazeilles; B. Malaizé; M. Verwaerde; M. Delattre; R. Abraham; D. Ponlevé
   Trade wind and monsoon regimes over West Africa during Terminations I, II and V

2. P. Le Mézo; L. Beaufort; P. Braconnot; L. Bopp; M. Kageyama
   Indian summer monsoon dynamics and marine productivity in the Arabian Sea, a model-data comparison perspective

3. M. Alonso-García; T. Rodrigues; C. A. Alvarez-Zarrikian; L. M. Petruny; M. Padilha; D. Kroon; J. D. Wright; X. Su; M. Inoue; the IODP Expedition 359 Scientists
   Late Pleistocene climatic and oceanographic variability in the Indian Ocean revealed by the Maldives Sea record of IODP Site U1467

4. M. Crucifix; P. Araya-Melo
   ENSO and tropical monsoon variability throughout the ice ages

5. R. H. Nagai; A. L. M. L. B. Souza; A. Gerotto; R. C. Lopes Figueira
   The South China Sea paleoceanographic conditions and terrigenous sediment supply in the last 400 ka

AFR

55. R. C. Njokuomega
   An insight into the mid-late Holocene vegetation of southeast Nigeria as deduced from a pollen profile of pond sediment, Abakut, Nigeria

56. R. Lemy; J. Marshall; M. Leng; F. Marret
   Palaeoeceanographic productivity changes in the Eastern Equatorial Atlantic since the penultimate glaciation

57. M. Holmgren; J. Klynder; S. Grab; J. Pitchett; A. Martínez-Cortizas; R. Bindler
   Hydroclimatic variations from the Last Glacial to historical times in the eastern Lesotho Highlands, southern Africa

58. T. Caley; B. Malaizé; L. Rossignol; E. McClymont; P. Vequaud; J. Crespin; K. Chartier; IODP Expedition 361 Scientists
   Agulhas leakage over the last 3 million years

59. A. L. Danial; M. F. Loutre; D. Swingedouw; T. Laepple; P. Braconnot; M. Kageyama; P. Bassinot; B. Malaizé; T. Caley
   Precession and obliquity controls on South Africa monsoon and fire

60. F. C. Rodríguez; Tovar F. Jiménez Espejo; I. R. Hall; S. R. Hemming; L. J. LeVay
   Spankongoid ichnofabrics at site U1475; a key to interpret paleoenvironmental conditions

61. F. J. Rodríguez; Tovar F. Jiménez Espejo; I. R. Hall; S. R. Hemming; L. J. LeVay
   Integrative analysis of ichnological and physical properties data at site U1475: assessing paleoenvironmental changes during the Messinian at the Agulhas Plateau region

62. M. Chevalier; B. Chase
   CREST Climate Reconstruction Software

63. J. Meyer; M. Van Daele; N. Tanghe; J. Eloy; D. Verschure; M. De Batis
   Drilling a crater at the Equator-insides from ICDP DeepCHALLA

64. A. Carr; B. Chase; A. Boom; J. Medina-Sanchez
   Refinement of stable isotope palaeoclimate proxies from southern African rock hyrax middens

65. M. Simon; C. Lean; S. Hemming; S. L. Goldstein; I. R. Hall; M. Ziegler
   Floccic palaeoclimate off southeast Africa

66. M. Sohier; L. Scott; S. A. Finkelstein; G. Gil Romera; E. Marais
   Modern Pollen-Based Predictions Of Southern African Vegetation And Paleovegetation Using Random Forests

67. D. Verschure; M. Van Daele; C. Wolff; N. Waldmann; I. Meyer; T. Ombori; F. Peterse; R. O’Grady; D. Schrnurrenberger; D. Ologe
   ICDP project DeepCHALLA: reconstructing East African climate change and environmental history over the past 250,000 years

68. A. I. De Sousa; Horta Dias Gomes A. Gomes; E. Skosey-LaLonde; B. Zinsious; C. Gonçalves; N. Bicho; M. Raja; J. Cascalheiro; J. Haws
   Diatoms from Mozambique: a tool for palaeoenvironmental reconstructions and to understand human evolution

69. F. Dietrich; N. Diaz; P. Deschamps; D. Sebag
   Calcium transfer over the last 20ky: from a granitic source to carbonate nodule sinks (northern Cameroon)

70. J. LeJlu; D. Yeko
   Environmental Dynamics in the crater lakes region of Western Uganda: Evidence from Phytolith and Charcoal Records

71. C. Contoux; A. Bonneau; N. Barrier; P. Sylvestre
   Variability of Sahel rainfall and Lake Chad extent during the Pliocene reconstructed by a chain of models

72. N. Diaz; F. Dietrich; D. Sebag; A. Durand; G. King; P. Valla; P. Deschamps; F. Herman; E. Verrecchia
   Quaternary palaeo-environmental reconstruction of the southwest Chad Basin: the invaluable legacy of soil relicts

73. G. Gil-Romera; L. Scott; E. Marais; G. A. Brook
   Holocene vegetation change in Late Quaternary fecal deposits of the Namib Desert and boundary region

74. T. Bardají; J.C. Cañaveras; S. Cuezva; A. Martínez Graña; S. Sánchez Moral
   Preliminary evidences of ancient wetter episodes in the Theban Mountains (Egypt)

75. E. Kyazike
   Kanyvore Island crevasses, food procurement strategies, and environmental change

SMILL

188. D. Sonneck: N. Ivashchenko; V. Kotlyakov; N. Yakulenko
   On the nature of the Mtd-Pleistocene transition

189. G. Philander
   On the dog that did not bark in the night: the curiously sporadic precession signals in records of recurrent Ice Ages

190. Z. Song; M. Latif; M. Latif; W. Park
   Greenland Ice Sheet Enhances Sensitivity of Pliocene Climate to Obliquity Variations in the Kiel Climate Model

191. A. Fedorov; G. Manucharyan
   Robust ENSO in a broad range of climates

192. C. Brierley; P. Hopley; G. Weedon
   An ultra-long speleothem record shows that orbital forcing alters the amplitude, but not period, of interannual variability

193. N. Burts: A. Fedorov; D. Sigman; S. Jaccard; R. Tiedemann; G. Haug
   The emergence of the Pacific meridional overturning circulation paced by obliquity cycles during the Pliocene
<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Session Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 - 13:00</td>
<td>Mozart Room</td>
<td>From the Mediterranean to the Caspian: palaeoclimate variability, environmental responses and human adaptive strategies.</td>
</tr>
<tr>
<td></td>
<td>Luis Galeote Room</td>
<td>Large-scale hydroclimate variability and change of the Common Era: Patterns, Impacts, and Processes.</td>
</tr>
<tr>
<td></td>
<td>Mariano Gracia Room</td>
<td>Multidisciplinary reconstruction of paleofloods.</td>
</tr>
<tr>
<td></td>
<td>Hotel Romareda Room 1</td>
<td>Do species move, adapt or die? Exploring past biodiversity, ecological change and community dynamics in the fossil record.</td>
</tr>
<tr>
<td></td>
<td>Hotel Romareda Room 2</td>
<td>Ancient DNA for understanding past biodiversity, human history, and drivers of ecosystem changes: achievements, limits and perspectives.</td>
</tr>
<tr>
<td></td>
<td>Room 11 (Auditorium)</td>
<td>Understanding past variations in atmospheric greenhouse gases to constrain future feedbacks in the Earth system.</td>
</tr>
<tr>
<td>15:00 - 17:00</td>
<td>Mozart Room</td>
<td>Regional and transregional climate variability over the last 2000 years.</td>
</tr>
<tr>
<td></td>
<td>Luis Galeote Room</td>
<td>Abrupt climate change: Challenges for Earth system understanding.</td>
</tr>
<tr>
<td></td>
<td>Mariano Gracia Room</td>
<td>Multidisciplinary reconstruction of paleofloods.</td>
</tr>
<tr>
<td></td>
<td>Hotel Romareda Room 1</td>
<td>Do species move, adapt or die? Exploring past biodiversity, ecological change and community dynamics in the fossil record.</td>
</tr>
<tr>
<td></td>
<td>Hotel Romareda Room 2</td>
<td>Global Dust Deposition in Past, Present, and Future Climates.</td>
</tr>
</tbody>
</table>

**MOZART ROOM**

*From the Mediterranean to the Caspian: palaeoclimate variability, environmental responses and human adaptive strategies*

**Conveners:** A. Moreno, W. Fletcher, V. Vaylan; **Chairs:** H. Laermanns, T. Yanina

- **11:00** INVITED TALK T. Yanina; V. Sorokin; A. Svitoch; R. Kurbanov; N. Sychev; N. Tkach
  Correlation of the paleogeographic events of the Caspian Sea and Russian Plain during the last climatic macrocycle.

- **11:15** A. Kislov; V. Yanko-Hombach
  Late pleistocene-holocene dynamics in the Caspian and black seas: data synthesis and paradoxical interpretations.

- **11:30** O. Naidina; K. Richards
  Reconstructing vegetation changes and climate from pollen from Late Pliocene to Early Pleistocene in the North Caucasus.

- **11:45** C. N. Roberts; J. Woodbridge; A. Palmisano; A. Bevan; S. Shennan; E. Asouti
  Climatic change and the origins of agriculture in the Eastern Mediterranean during the last Glacial-Interglacial transition.

- **12:00** H. Laermanns; D. Kelterbaum; S. Matthias May; G. Kirkitadze; M. Elashvili; H. Brückner
  Bronze Age settlement mounds on the Colchian plain at the Black Sea coast of Georgia a geoarchaeological perspective.

- **12:15** S. Leroy; A. Amini
  Palaeoenvironmental changes and Meso-Neolithic human-landscape interaction in the Caspian coast.

- **12:30** R. Domingo; A. Alday; L. Montes; P. González Sampériz; M. Sebastián; A. Soto; J. Aranbarri; J. L. Peña; M. M. Sampietro; P. Utrilla

- **12:45** P. Utrilla; M. Bea; L. M. García-Simón
  Looking for new territories. What Levantine Rock Art can bring to the climate question.
**Thursday 11th May 2017**

**MOZART ROOM**

Regional and transregional climate variability over the last 2000 years  
*Conveners: H. Goosse and N. Abram; Chairs: B. Martrat, S. J. Phipps, H. McGregor*

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td>A. Schurer; M. Mann; E. Hawkins; G. Hegerl; S. Tett</td>
<td>Importance of the Pre-Industrial Baseline in Determining the Likelihood of Breaching the Paris Limits</td>
</tr>
<tr>
<td>15:15</td>
<td>R. Neukom; PAGES2k Consortium members</td>
<td>Global mean temperature reconstructions over the Common Era based on the new PAGES2k proxy database</td>
</tr>
<tr>
<td>15:30</td>
<td>J. Emile-geay; J. Wang; N. McKay; D. Guillot; B. Rajaratnam</td>
<td>Patterns of climate change over the Common Era</td>
</tr>
<tr>
<td>15:45</td>
<td>N. Steiger; J. J. Gómez-Navarro; R. Neukom; J. Wang; J. Werner</td>
<td>Temperature field reconstructions and method intercomparison over the past 2000 years</td>
</tr>
<tr>
<td>16:00</td>
<td>A. Orsi; B. Stenni; M. Curran; N. Abram; S. Goursaud; V. Masson-Delmotte; PAGES Antarctica2K consortium</td>
<td>Antarctic climate variability at regional and continental scale over the last 2000 years</td>
</tr>
<tr>
<td>16:15</td>
<td>L. Thomas; J. Melchior van Wessem; J. Roberts; E. Isaksson; Antarctica 2k community</td>
<td>Antarctic snow accumulation over the past 2000 years</td>
</tr>
<tr>
<td>16:30</td>
<td>X. Crosta; C. Philippine; E. Johan; D. Robert; M. Guillaume</td>
<td>Late Holocene sea ice dynamics and potential forcing mechanisms off East Antarctica</td>
</tr>
<tr>
<td>16:45</td>
<td>J. Franke; S. Brönnimann; J. Bhend</td>
<td>A monthly paleo-reanalysis based on instrumental measurements, historical documents and tree-ring data for the period 1600 to 2000</td>
</tr>
</tbody>
</table>
Thursday 11th May 2017

**LUIS GALVE ROOM**
Large-scale hydroclimate variability and change of the Common Era: Patterns, Impacts, and Processes
*Conveners: M. Prange, N. Scroxton, M. Mohtadi, S. Steinke and H. Roop; Chairs: J. Smerdon, E. Coo*

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>S. St. George; T. Ault; C. Carrillo; S. Coats; J. Mankin; J. Smerdon</td>
<td>What to expect when you’re expecting decadal variability in hydroclimatic proxies</td>
</tr>
<tr>
<td>11:15</td>
<td>S. Lewis; A. Gallant</td>
<td>Assessing the range of hydroclimate variability in data poor regions: insights from Australia</td>
</tr>
<tr>
<td>11:30</td>
<td>K. Allen; R. Evans; E. Cook; S. Allie; F. Ling; G. Carson; P. Baker</td>
<td>Reconstructions of winter and summer hydroclimate in western Tasmania</td>
</tr>
<tr>
<td>11:45</td>
<td>S. Metcalfe; D. Stauble; G. Endfield</td>
<td>Hydroclimate in the Mexican Monsoon region: understanding the nature and impacts of climatic variability using different archives</td>
</tr>
<tr>
<td>12:00</td>
<td>F. Charpentier Ljungqvist</td>
<td>Summer temperature and drought co-variability across Europe since 850 CE</td>
</tr>
<tr>
<td>12:15</td>
<td>F. Klein; H. Goosse</td>
<td>Reconstructing East African rainfall and Indian Ocean sea surface temperatures over the last centuries using data assimilation</td>
</tr>
<tr>
<td>12:30</td>
<td>S. Coats</td>
<td>Paleoclimatic constraints on the spatio-temporal character of past and future drought in climate models</td>
</tr>
<tr>
<td>12:45</td>
<td>C. Raible; S. Blumer; M. Messmer; F. Lehner; R. Blender; T.F. Stocker</td>
<td>Extratropical cyclone characteristics during the last millennium and the future implications on wind and precipitation extremes</td>
</tr>
</tbody>
</table>

**LUIS GALVE ROOM**
Abrupt climate change: challenges for Earth System understanding
*Conveners: G. Lohman, R. Ivanovic, L. Gregoire, G. Knorr, S. Barker and A. Burke
Chairs: G. Lohmann, G. Knorr, S. Barker*

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td>F. Corrick; R. Drysdale; J. Hellstrom; E. Wolff; D. Fleitmann; E. Capron; I. Couchoud</td>
<td>Widespread speleothem evidence for the synchronous timing of millennial-scale climate events</td>
</tr>
<tr>
<td>15:15</td>
<td>F. Capron; S.O. Rasmussen; T.J. Popp; V. Gkinis; B. Vaughn; T. Erhardt; H. Fischer; T. Blunier; A. Grinsted; A. Landais; J. Pedro; et al. et al.</td>
<td>New insights into the anatomy of abrupt climate changes based on high-resolution records from the Greenland NEEM and NorthGRIP ice cores</td>
</tr>
<tr>
<td>15:30</td>
<td>M. Warf; F. Eynaud; D. Swingedouw; V. Masson-Delmotte; J. Matthiessen; C. Kissel; J. Zumaque; L. Rossignol; J. Jouzel</td>
<td>Regional seesaw between North Atlantic and nordic seas during the last glacial abrupt climatic events</td>
</tr>
<tr>
<td>15:45</td>
<td>M. Tetard; L. Beaufort; L. Licari</td>
<td>Quantifying abrupt changes of bottom water oxygenation in the northeastern Pacific Ocean using new benthic foraminiferal tools.</td>
</tr>
<tr>
<td>16:00</td>
<td>T. Bauska; E. Brook; S. Marcott; D. Baggenstos; S. Shackleton; J. Severinghaus; V. Petrenko</td>
<td>Abrupt climate change events and atmospheric CO2: constraints from ice core δ13C-CO2 during the last glacial period</td>
</tr>
<tr>
<td>16:15</td>
<td>X. Zhang; G. Knorr; G. Lohmann; S. Barker</td>
<td>Atmospheric CO2 controlled stability of glacial climate</td>
</tr>
<tr>
<td>16:30</td>
<td>L. Sime; R. Rhodes; P. Hopcroft</td>
<td>Abrupt Dansgaard-Oeschger warming events in Greenland: d18O model-data comparison</td>
</tr>
<tr>
<td>16:45</td>
<td>F. Galbraith; T. Merlis; C. DeLavergne</td>
<td>Finding the sweet spot for abrupt change: influences of atmospheric CO2, orbital forcing and terrestrial ice sheets on AMOC stability</td>
</tr>
</tbody>
</table>
**Thursday 11th May 2017**

### MARiano GrACIA ROOM

**Multidisciplinary reconstruction of paleofloods**


<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>M. Kahle; R. Glaser; P. Francus</td>
<td>PAGES Floods WG database project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A PAGES Floods WG core project: The Collaborative Flood Database for Multiple Archive Types</td>
</tr>
<tr>
<td>11:15</td>
<td>F. Arnaud; P. Sabatier; B. Wilhelm; F. Ficetola; F. Moiroux; J. Poulenard; A. Bichet; W. Chen; J.L. Reyss; L. Gielly; M. Bajard; P. Taberlet; R. Arnaud</td>
<td>Timescale-dependent interplays of solar and temperature forcing to explain a 6-kyr record of flood frequency and intensity in the western Mediterranean Alps</td>
</tr>
<tr>
<td>11:30</td>
<td>J. P. Corella; B. L. Valero-Garcés; S. M. Vicente-Serrano; A. Brauer; G. Benito</td>
<td>On the frequency, seasonality and atmospheric drivers of Late Holocene heavy rainfall in Western Mediterranean</td>
</tr>
<tr>
<td>11:45</td>
<td>M. Ahlborn; M. Armon; Y. Ben Dor; A. Brauer; E. Morin; I. Neugebauer; M. J. Schwab; R. Tjallingii; Y. Enzel</td>
<td>Frequent extreme rainstorms during late Holocene regional drought in the Dead Sea basin</td>
</tr>
<tr>
<td>12:00</td>
<td>U. Lombardo; L. Rodrigues; A. Mestrot; H. Veit</td>
<td>Fluvial dynamics in the southern Amazonian foreland basin on annual and millennial time scales</td>
</tr>
<tr>
<td>12:15</td>
<td>F. De Carlo; T. Hubble; D. Penny; D. Petley; T.Job; R. Hamilton; S. Clarke; P. Gadd; H. Brand; A. Helfensdorfer</td>
<td>Palaeolake Mannum a high-resolution record of Holocene streamflow from the Murray Darling River Basin, and a proxy for Southern Hemisphere hydroclimate</td>
</tr>
<tr>
<td>12:30</td>
<td>C. Sánchez-García; L. Schulte; F. Carvalho; J. C. Peña</td>
<td>Historical flood analysis of river catchments in south-eastern Spain</td>
</tr>
<tr>
<td>12:45</td>
<td>O. Wetter</td>
<td>Reconstruction of magnitude and seasonality of pre instrumental floods based on documentary evidence.</td>
</tr>
</tbody>
</table>

**"Lunch time (MultiUSos room/Lunch Area)"**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td>INVITED TALK V. Baker</td>
<td>Paleoflood Data and Increasing Flood Extremes</td>
</tr>
<tr>
<td>15:15</td>
<td>D. García-Castellanos; J. E. O’Connor</td>
<td>Outburst flood erosion consistent with long-term landscape evolution models</td>
</tr>
<tr>
<td>15:30</td>
<td>A. Agatova; R. Nepop</td>
<td>Late Pleistocene outburst floods of the ice-dammed lakes and climate changes in the highlands of the SW Tuva, mountains of Southern Siberia</td>
</tr>
<tr>
<td>15:45</td>
<td>C. Lopes; A. C. Mix</td>
<td>The record of mega floods in marine sediments: an example from the NE Pacific</td>
</tr>
<tr>
<td>16:00</td>
<td>G. Benito; V. R. Thorndycraft; A. Medialdea; C. Sancho; A. Dussaillant; M. J. Machado; X. Rodríguez-Loveras</td>
<td>Glacial lake outburst floods in the northern patagonian icefield during the holocene</td>
</tr>
<tr>
<td>16:15</td>
<td>INVITED TALK E. Støren; J. Bakke; K. Engeland; E. Kolstad; Ø. Paasche; A. Aano</td>
<td>Integrating lake sediment paleoflood reconstructions in Norwegian flood frequency scenarios</td>
</tr>
<tr>
<td>16:30</td>
<td>J. A. Ballesteros Cánovas; T. Hussain Koul; S. Guillet; H. Alamgir Shabir; B. Shah Mutayib; M. Stoffel</td>
<td>Coping with extreme events: the past flood history of Kashmir</td>
</tr>
<tr>
<td>16:45</td>
<td>L. Schulte; O. Wetter; B. Wilhelm; J. C. Peña; L. Glur; B. Amann; S. B. Wirth; F. Carvalho</td>
<td>A PAGES Floods WG pilot project: integration of multidisciplinary datasets to reconstruct a comprehensive paleoflood picture in the Bernese Alps</td>
</tr>
</tbody>
</table>
### Thursday 11th May 2017

**HOTEL ROMAREDA-ROOM 1**

*Do species move, adapt or die? Exploring past biodiversity, ecological change and community dynamics in the fossil record*

**Conveners:** N. Whitehouse, H. Roe, D. Magri, A. Davies and M. J. Bunting  
**Chairs:** N. Whitehouse, H. Roe, A. Davies, D. Magri, J. Bunting

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td><strong>INVITED TALK</strong> H. Seppä; N. Stivrins</td>
</tr>
<tr>
<td></td>
<td>Biotic turnover rates during the Pleistocene-Holocene transition</td>
</tr>
<tr>
<td>11:15</td>
<td>D. Schreve</td>
</tr>
<tr>
<td></td>
<td>The view from the edge: mammalian turnover and abrupt climate change during the Last Glacial in Britain</td>
</tr>
<tr>
<td>11:30</td>
<td>T. Giesecke; W. O. van der Knaap; J. F.N. van Leeuwen; S. Brewer; S. Wolters</td>
</tr>
<tr>
<td></td>
<td>Postglacial changes in the floristic latitudinal diversity gradient in Europe</td>
</tr>
<tr>
<td>11:45</td>
<td>N. Limondin-Lozouet; K. Penkman; P. Antoine</td>
</tr>
<tr>
<td></td>
<td>The Quaternary history of non-marine molluscs in the Somme valley (northern France) during the last 1 Myr</td>
</tr>
<tr>
<td>12:00</td>
<td>K. Agiadi; A. Girone; E. Koskeridou; P. Moissette; J.J. Cornée; F. Quillévéré; V. Karakitsios</td>
</tr>
<tr>
<td></td>
<td>The Pleistocene fish fauna along the eastern coast of Rhodes Island (eastern Mediterranean)</td>
</tr>
<tr>
<td>12:15</td>
<td>J. Conroy; A. Collins; M. Bush; J. Overpeck; J. Cole; D. Anderson</td>
</tr>
<tr>
<td></td>
<td>A 400-year isotopic record of seabird response to eastern tropical Pacific productivity</td>
</tr>
<tr>
<td>12:30</td>
<td>D. Hebbeln; T. Krengel; A. Schröder-Ritzrau; N. Frank; C. Wienberg</td>
</tr>
<tr>
<td></td>
<td>Sea-saw-like repeated extinction patterns of cold-water corals across the Strait of Gibraltar</td>
</tr>
<tr>
<td>12:45</td>
<td><strong>INVITED TALK</strong> L.S. Epp; S. Kruse; N.J. Kath; L. Pestryakova; U. Herzsuh</td>
</tr>
<tr>
<td></td>
<td>Larch species turnovers and vegetation change in the arctic-boreal treeline ecotone during the Holocene</td>
</tr>
</tbody>
</table>

**“Lunch time (Multiusos room/Lunch Area)”**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td>C.R. Schwörer ; N. Álvarez; F. Gugerli; C. Sperisen; W. Tinner</td>
</tr>
<tr>
<td></td>
<td>Tracking Holocene genetic variability of Swiss mountain forests using ancient DNA</td>
</tr>
<tr>
<td>15:15</td>
<td>R. Cheddadi ; M. Araújo; L. Maiorano; M. Edwards; A. Guisan; M. Carré; M. Chevalier; P. Pearman</td>
</tr>
<tr>
<td></td>
<td>Temperature range shifts for three European tree species over the last 10,000 years</td>
</tr>
<tr>
<td>15:30</td>
<td>R. Cunill Artigas; A. Pèlachs Mañosa; J. Manuel Soriano López; R. Pérez Obiol; J. C. García Codrón; V. Carracedo Martín</td>
</tr>
<tr>
<td></td>
<td>Abies alba in the Pyrenees: paleoenvironmental and high spatial precision studies to understand past and current distribution</td>
</tr>
<tr>
<td>15:45</td>
<td>W. Fletcher; J. Campbell; S. Joannin; P. Hughes; S. Mischke; C. Zielhofer</td>
</tr>
<tr>
<td></td>
<td>Biotic response to centennial-scale climate variability in Northwest Africa: Were there Holocene analogues for current Cedrus atlantica dieback?</td>
</tr>
<tr>
<td>16:00</td>
<td>A. Dawson; C. Paciorek; J. McLachlan; S. Goring; S. Jackson; J. Williams</td>
</tr>
<tr>
<td></td>
<td>Changes in prehistoric forest composition in the Upper Midwestern United States in the last 2000 years</td>
</tr>
<tr>
<td>16:15</td>
<td>J. Iriarte; M. Robinson; J. de Souza; M. Cardenas; P. Mayle; R. Corteletti; P. DeBlasis</td>
</tr>
<tr>
<td></td>
<td>The Making of the Forest: Human-induced spread of Araucaria forest out of their natural range in the southern Brazilian highlands</td>
</tr>
<tr>
<td>16:30</td>
<td>K. Panagiotopoulou; J. Holtvoeth; A. Bertini; K. Kouli; T. Donders; L. Sadori; R. D. Pancost; B. Wagner; M. Melles</td>
</tr>
<tr>
<td></td>
<td>Lake Ohrid: a unique lacustrine record of vegetation and climatic history of the Early Pleistocene in SE Europe</td>
</tr>
<tr>
<td>16:45</td>
<td>S.K. Sadasivam; S. P. Thomas; B. Shanmuganathan; S. Krishnan; K. Goswami; M. Dev; M. Sundararajan; M. Kumar Jaiswal; A. Kumaresan; S. Kumar Sadasivam</td>
</tr>
<tr>
<td></td>
<td>Spatio-temporal dynamics of bacterial communities in response to marine transgression and regressions occurred since late Pleistocene</td>
</tr>
</tbody>
</table>
Thursday 11th May 2017

HOTEL ROMAREDA-ROOM2
Ancient DNA for understanding past biodiversity, human history, and drivers of ecosystem changes: achievements, limits and perspectives
Conveners/Chairs: C. Giguet-Covex, L. Epp, I. Domaizon and I. Greve Alsos

11:00 INVITED TALK L. Parducci; E. Ahmed; M. Välarinta; S. Salonen; L. Han; M. Winther Pedersen; T. Slotte; E. Willerslev; B. Wohlfarth
Shotgun ancient DNA analysis in Lateglacial lake sediments from Sweden

11:15 INVITED TALK N. Álvarez; S. Schmid; C. Sperisen; W. Tinner
Application of HyRAD-X (a method combining reduced representation of the exome and hybridization capture applied to ancient DNA) to time series of subfossil needles unravels the early Anthropocene history of the silver fir, Abies alba, in a population from the southern Alps

11:30 C. Clarke; M. Edwards; I. Alsos; J. Inge Svendsen; H. Haftidason
Polar Ural Mountains: A surprisingly rich flora for the past 25,000 years

11:45 H.H. Zimmermann; L. S. Epp; K. R. Stoof-Leichsenring; U. Herzschuh
Sedimentary ancient DNA offers new insights into the vegetation history of western Beringia since the Eemian

12:00 M. Edwards; I. Alsos; N. Yoccoz; E. Coissac; M. Moora; T. Goslar; L. Gielly; J. Davison; J. Haile; C. Brochmann; M. Zobel; P. Taberlet
The interpretation of sedDNA records from soil samples: examples from Svalbard and Siberia

12:15 M. Muschick
Subfossils and ancient DNA shed light on the evolution of East African cichlid fishes

12:30 M. Van Hardenbroek; G. Cavers; A. Crone; K. Davies; T. Fonville; A. Henderson; P. Langdon; H. Mackay; F. McCormick; F. Ficetola; N. Whitehouse; T. Brown
Using sedaDNA alongside palaeoenvironmental proxies for understanding wetland archaeological sites

12:45 D. Huang; Y. Tuan Doreen Huang; J. Linderholm; A. van Woerkom; M. Brundin; H. Zhang; R. Zale; L. Dalen; J. Klaminder
Who came first to central Sweden, reindeers (Rangifer tarangus) or human hunters?: insights from ancient-DNA analyzes of lake sediments and archeological material

HOTEL ROMAREDA-ROOM2
Global dust deposition in past, present and future climates
Conveners: F. De Vleeschouwer, G. Winckler, N. Mahowald and F. Lambert; Chairs: F. De Vleeschouwer, F. Lambert

15:00 S. Pratte; F. De Vleeschouwer; M. Garneau
Late Holocene paleo-records of atmospheric dust deposition in eastern Canada

15:15 M. Rylander; A. Martinez-Cortizas; R. Bindler; S. Hansson; J. Kaal; N. Silva Sanchez; S. Greenwood; C. M. Mörtl; S. Rauch
A high peat and carbon accumulation event driven by changes in dust mineralogy

15:30 C. Li; G. Le Roux; J. Sonke; N. Mattielli; N. Pirotrowska; N. Van der Putten; C. Jeandel; F. De Vleeschouwer
Holocene dust composition in the Indian Ocean inferred from Amsterdam Island peat geochemistry

15:45 E. Resongles; B. Spiro; D. Large; P. Bricke; F. De Vleeschouwer; G. Le Roux; D. Weiss
Peat record of Holocene atmospheric dust deposition on the Falkland Islands

16:00 J. Mason; P. M. Jacobs; W. C. Johnson; X. Miao; L. Szymanski; E. Marin-Spiotta
Dust deposition and soil organic carbon storage at the landscape scale: Case study of Holocene loess, central Great Plains, USA

16:15 A. Panait; S. Mark Hutchinson; I. Tanțău; A. Cosmin Diaconu; A. Feurdean
Holocene aeolian fluxes from northern Romania: a multiproxy approach to reconstruct the deposition of aeolian particles and their control factors

16:30 S. Pichat; S. Kienast; M. Cornet; L. Misslaen; O. Sulpis
Changes in fine detrital material sources in the Eastern Tropical Pacific during the last deglaciation

16:45 M. Ruppel; J. Svensson; J. Ström; E. Isaksson; A. Korthola
Is light-absorbing particulate deposition increasing the melt of Svalbard glaciers?
Thursday 11th May 2017

ROOM 11 AUDITORIUM (BASEMENT)
Understanding past variations in atmospheric greenhouse gases to constrain future feedbacks in the Earth System
Conveners: T. Bauska, P. Hopcroft, B. Stocker and Z. Yu

11:00 INVITED TALK J. Schmitt; M. Baumgartner; O. Eicher; B. Seth; J. Beck; F. Joos; H. Fischer
Stable Isotope Changes of atmospheric N2O during the last 150 krys: What the ice core record may tell us about terrestrial and marine N2O emissions

11:15 INVITED TALK L. Menviel
Which mechanisms led to Heinrich 1 atmospheric CO2 increase?

11:30 J. Rae; A. Burke; L. Robinson; J. Adkins; T. Chen; C. Cole; E. Littley; D. Nita; B. Taylor
Millennial to centennial evolution of the Southern Ocean CO2 store

11:45 F. Muschitiello; W.J. D’Andrea; T. M. Dokken; A. Schmittner
Deglacial interactions between ocean circulation and the biological pump in the Nordic Seas: implications for future atmospheric CO2 variability

12:00 G. Knorr; J. Hasenclever; L. Rüpeke; P. Köhler; J. Morgan; K. Garofalo; S. Barker; G. Lohmann; I. Hall
Sea level fall during glaciation stabilized atmospheric CO2 by enhanced volcanic degassing

12:15 J. Menking; A. Buffen; S. Shackleton; T. Bauska; E. Brook; A. Schmittner; R. Rhodes; J. Severinghaus; M. Dyonisius; V. Petrenko
Stable Isotopes of Carbon Reveal a Complex Trajectory for CO2 Drawdown at Last Glacial Inception

12:30 J. Beck; M. Bock; J. Schmitt; B. Seth; J. Chappellaz; H. Fischer
Shift in the glacial interglacial methane budget from dual isotope records

12:45 S. Eggleston; O. Cartapanis; S.L. Jaccard; E. D. Galbraith
Global foraminifera δ13C database to assess changes in the efficiency of the soft tissue pump on glacial-interglacial timescales

Working Group meeting: PAGES2k network
AUDITORIO: ROOM 6 | 13:00 - 15:00 H.

INQUA Palaeoclimate Commission
AUDITORIO: ROOM 11 | 17:00-19:00 H.
Reconstructed and simulated temperature asymmetry between continents in both hemispheres over the last centuries

M. Cisneros; I. Cacho; J. Frigola; M. Canals; A. Sánchez-Vidal; A. Moreno; H. Stoll; R.L. Edwards; H. Cheng; J.J. Fornós

A 25-year record of climate and chemistry variability at the Pine Island Glacier ice divide, Antarctica

J. Pearson; K. Anchukaitis; N. Pederson; J. Donnelly; D. Bishop

Common Era climate reconstructions from the northeastern United States

Y. Ait Brahim; A. Sifeddine; M. Khodri; H. Cheng; F W Cruz; L. Sha; N. Pérez-Zanon; J. A. Wassenburg; L. Bouchaou

Speleothem δ18O record of multidecadal Atlantic oscillations during the last millennium in Morocco

R. Marchant; C. Courtney Mustaphi; V. Muiruri; S. Rucina; E. Githumbi; S. Richer; F. Lane; A. Shoemakker

Wetland transgressions and recent late Holocene vegetation and fire variability in the semi-arid Amboseli landscape, southern Kenya

G. Yu

Long-term aquatic ecosystem responding to climate change during the last 1000 years

K. Li; X. Liu; U. Herzschuh; Y. Wang

Rapid climate fluctuations over the past millennium: evidence from a lacustrine record of Basomtso Lake, southeastern Tibetan Plateau

R. Neukom; A. Schurer; G. Hegerl

The influence of proxy noise on hemispheric temperature reconstructions during the last Millennium

M. Alexandrin; A. Grachev; O. Solomina

Estimating sediments of the Lake Donguz-Orun (Central Caucasus) as a chronicle of the climate change in the region

G. De Cort; F. Mees; E. Ryken; C. Wolff; R. W. Renaut; M. Creutz; T. Van der Meeren; G. Haug; D. O Olago; D. Verschuren

A 1,300-year moisture-balance reconstruction from the dry eastern rift valley of East Africa: the sediment record of hypersaline Lake Bogoria

R. Bruel; S. Girardclos; A. Marchetto; K. Kremer; C. Crouzet; J. L. Reyss; P. Sabatier; M. E. Perga

Did large lakes' ecology react to Medieval warming?

V. Valler; J. Franke; S. Brönnimann

Global climate field reconstruction from 1600 to 2000 based on multi-proxy data and the Ensemble Kalman Fitting approach

J. Jones; S. Gilles; H. Goosse; N. Abram; P. Canziani; D. Charman; K. Clem; X. Crosta; C. de Lavergne; J. Eisenman; M. England; R. Fogt

Assessing recent trends in high-latitude Southern Hemisphere surface climate

J. Jungclaus

The PMIP4/CMIP6 Past1000 Simulations

F. Shi; K. Fang; C. Xu; Z. Guo; B. H. P.

Interannual to centennial variability of the South Asian summer monsoon in the past millennium

A. Agatova; R. Nepop

Climate changes over the last 2000 years recorded in various proxy archives in the SE Altai, mountains of Southern Siberia

G. Vallejo-Espinosa; J. Abella-Gutiérrez; J. C. Herquera

Variability of the surface stratification in the southern domain of the California Current System during the last 2 millennia

J. G. Franke; J. Werner; R. V. Donner

Reconstructing the leading mode of multi-decadal North Atlantic variability over the last two millenia using functional paleoclimate networks

B. Fallah; W. Acevedo; U. Cubasch

Palaeo Data Assimilation of Pseudo-Tree-Ring-Width Chronologies in a Climate Model

T. Opel; T. Lapele; H. Meyer; A. Derevljan; S. Wetterich

Northeast Siberian ice wedges confirm Arctic winter warming over the past two millennia

J. Abella-Gutiérrez; J. C. Herquera

The Pacific Decadal Oscillation

T. Münch; T. Laepple

Estimating Antarctic climate variability of the last millennium

D. Barriopedro; N. Calvo; R. García-Herrera; F. Jaume-Santero

PALEOSTRAT: PALEOmodelization from a STRATospheric perspective

K. M. Saunders; R. Neukom; C. Dätwyler; C. Butz; M. Grosjean; D. A. Hodgson

Westery wind variability at sub-Antarctic Macquarie Island and its link to Southern Hemisphere wind and temperature

V. Margaryan

The problems of change climate conditions for the period of over the last century over mountainous territory of Armenian Republic
Thursday 11th May 2017

159 J. Franke; M. Evans; G. Hegerl; S. Brönnimann
Climate change detection and attribution using high resolution paleoclimate observations

160 C. A. Melo Aguilar; J. F. Gonzalez Rouco; E. García Bustamante; J. Navarro Montesinos
Simulation and inversion of borehole temperature profiles in surrogate climates: last millennium LULC influence on SAT-GST coupling

161 J. J. Gómez Navarro; E. Zorita; C. Raible; R. Neukom
Testing the analog method in reconstructing the global mean annual temperature during the Common Era

162 M. Fuentes; R. Salo; J. Bjorklund; R. Sefjigen; P. Zhang; B. Gunnarson; J. C. Aravena; H. W. Linderholm
A 970 year-long summer reconstruction from Rogen, west central Sweden, based on Blue Intensity from tree rings

163 F. J. Cuesta Valero; A. Garcia Garcia; H. Beltrami; E. Zorita
Long-term ground surface temperature from geothermal data in North America as a complement for GCM control simulations

164 B. Ellis; N. Abram
Indian Ocean Dipole variability from Indonesian corals during the Little Ice Age

165 P. Freitas; C. Monteiro; P. Butler; C. Richardson; D. Reynolds; J. Scourse; M. Gaspar
Productivity in the Iberian Upwelling System since the late 18th century using the annually-resolved sclerochronology of the bivalve Glycymeris glycymeris

166 A. Moy; T. Van Ommen; J. McConnell; M. Curran; S. Phipps; V. Masson-Delmotte; A. Orsi; J. Roberts; D. Dahl-Jensen; T. Popp; A. Svensson; A. Landais
Climate history at Aurora Basin North, East Antarctica: A 2,000 year isotopic record

167 P. T. Spooner; D. J. R. Thornalley; P. Moffa-Sanchez; D. W. Oppo; I. Hall
High resolution records of the Northeast Atlantic from the Late Holocene: Exceptional 20th century changes?

168 K.-H. Lin; P.-K. Wang
Climate variability during the last millennium from literature data and model

169 A. Garcia Garcia; F. J. Cuesta-Valero; H. Beltrami; J. E. Smerdon
Temperature and salinity temperature coupling in the CMIP5 historical and future simulations

170 A. Garcia Garcia; F. J. Cuesta-Valero; H. Beltrami; C. Mondéjar; J. Finnis
Ground Heat Flux within the PMIP3/CMIP5 Last Millennium Simulations and Estimates from Geothermal Data

171 H. Beltrami; G. S. Matharoo; J. E. Smerdon; L. Illanes; L. Tarasov
Impacts of the Last Glacial Cycle on Ground Surface Temperature Reconstructions over the Last Millennium

172 M. Gagen; E. Zorita; D. McCarrill; M. Zahn; G. Young; I. Robertson
Internal variability in North Atlantic summer storm tracks over Europe over the past millennium.

173 C. S. Allen; E. R. Thomas
A new proxy for reconstructing past wind strength in the Amundsen-Bellingshausen Sea

174 J. Estrela-Martínez; P. Butler; J. Scourse; B. Schöne
Annually resolved water temperature over the northern North Sea for the past 500 years associated with Northern Hemisphere volcanism

175 D. Álvarez; P. Pedreros; F. Torrejón; A. Araneda; R. Urrutia
Temperature variability in lakes in different altitude in Central Chile during the last millennium.

176 B. jalali; M.-A. Scre; V. Maselli; T. Lüer; N. Kallet; M.-A. Bassetti; S. Touacane; S. Schmidt; F. Châles; J. Cacho; H. Stoll
Deltic and coastal sediments as recorders of Mediterranean regional climate and human impact

177 H. McGregor; S. Phipps; L. von Gunten; B. Martrat; H. Linderholm; N. Abram; O. Bothe; R. Neukom; S. St. George; M. Evans; D. Kaufman; H. Goosse
The PAGES 2k Network, Phase 3: Introduction, Goals and Call for Participation

178 A. Orsi; A. Landais; B. Stenni
The last thousand years at Talos Dome, Antarctica

179 S. Metcalfe; J. Homes; M. Burn; C. Lane; S. Horn
Palaeoecological records of climate change in the Central American & Intra-America Seas region over the last 2000 years

180 V. Flores-Aquique: P. Arias; M. Rojas
Southeast Pacific subtropical anticyclone and southerly winds variability over the Last Millennium and historical period from climate models and high-resolution proxy records

181 M. Iglesias; J. Pisonero; H. Cheng; R. Lawrence Edwards; H. Stoll
Study of the instrumental period using geochemical high-resolved data of a 600yr speleothem of the Northwest Iberian Peninsua

182 C. Campa; I. Várllo; A. Muñoz; J. Pisonero; H. Stoll
A speleothem record of the last millennium in Southeast Spain

183 M. Bartolomé; C. Sancho; A. Moreno; A. Belmonte; M. Leunda; A. Delgado-Huertas; B. Oliva-Urcía; I. Cacho; H. Stoll; R. L. Edwards; H. Cheng
Is the climate signal adequately recorded in the 18O isotope composition from ice cave deposits? Climate variations during the Little Ice Age and the Industrial Era inferred from Pyrenean ice deposits and stalagmites

184 H. Wu; D. Dissard; E. Douville; B. Blamart; L. Bordier; A. Dapojnign; F. Le Conne; A. Tribollet; C. Lazareth
370 years of sea surface pH and SST variability in the South Pacific inferred from Diploastrea heliopora coral proxy records

185 I. Semenova; V. Ovcharuk
Droughts of the last centenary period in Ukraine

186 F. Bonitz; C. Andersen; T. Trofinova
Molluscan sclerochronological-derived paleo proxy records and their potential to obtain a better

FLOOD

1 J. P. Schimmelmann; H. Nguyen-Van; D. Nguyen-Th.y; B. Zolitschka; T. Ta-Van; N. Nguyen-nh; P. Ta H.a; T. Dang-Phuong; T. L-Quyet; Q. Nh Pham-Nu; V. Huynh-Kim
Exploring the paleoenvironmental potential of laminated maar sediment in central Vietnam: An archive of regional paleo-flooding?

2 G. Furdada Bellavista; A. Victoriano; A. Díez-Herrero; M. Génova; M. Guinau; G. Khazaradze; J. Calvet
Multidisciplinary palaeoflood reconstruction using dendrogeomorphology and hydraulic modelling in Portainé (Eastern Pyrenees, Iberian Peninsula)
A multi-centennial record of past floods and earthquakes in Valle d’Aosta, Mediterranean Italian Alps

Bayesian MCMC flood frequency analysis integrating paleoflood data

Recent hydrological variability of the Moroccan Middle-Atlas Mountains inferred from sedimentological and geochemical analyses of lake sediments

Quantifying sediment delivery during floods in Mediterranean mountain watersheds using lake sediment records (Iberian Range, Spain)

Tree-ring reconstruction of Upper Indus Watershed Streamflow using Hierarchical Bayesian Regression

The impact of land-use changes on palaeoflood and recent floods magnitude and frequency: Portainé (Eastern Pyrenees, Iberian Peninsula)

Paleoecological and related environmental changes of a Mediterranean rambla (Castellón, NE Spain)

Exploring the Quaternary palaeoecological potential of Portuguese Macaronesian archipelagos: examples from Madeira and Faial Islands

Numerical modeling of lake overtopping: the Bonneville flood

Holocene river floods in Glomma, southern Norway

Influences of the atmospheric variability and external forcing on flood frequencies in the Hasli-Aare (Bernese Alps, Switzerland) during the last 700 years

On the application of freshwater diatoms from marine sediments as a proxy for monsoons

Reconstructing the frequency of Glacial Lake Outburst Floods in Patagonia: Introducing the Paleo-GLOFs project

Non-stationarity in the evolution of major floods in the Ebro River (NE Iberian Peninsula)

Indirect estimation from paleoflood evidences of the liquid and solid loads of the November 2015 and 2016 flash floods in the Síó River (NE Iberian Peninsula)

A century of limnimetric shifts in central Argentina: floods, droughts and climate change linkages

A pollen-vegetation model

Reconstructing the frequency of Glacial Lake Outburst Floods in Patagonia: Introducing the Paleo-GLOFs project

Drivers and implications of a late-Holocene palaeoflood record from Brotherswater, northwest England
<table>
<thead>
<tr>
<th>S. Fontana; T. Giesecke</th>
<th>Processes and patterns of vegetation change during the Holocene at the forest-steppe ecotone in northern Patagonia, Argentina</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Greve Alsos; P. Sjögren; L. Gielly; A. Paus; M. E. Edwards; M. Leng; M. Forwick; M. K. Føreid Merkel; C. T. Langdon; J. Bakke; T. Åm; T. G. Brown</td>
<td>The LGM ice-free Andøya island - did local favourable condition combined with distinct long-distance dispersal routes cause non-analogue vegetation?</td>
</tr>
<tr>
<td>D. Faust; C. Richter; D. Wolf; C. Roettig</td>
<td>Some appear, some adapt, some die stratigraphy by means of quaternary guide assemblages of land snails.</td>
</tr>
<tr>
<td>I. Greve Alsos; P. Sjögren; L. Gielly; A. Paus; M. E. Edwards; M. Leng; M. Forwick; M. K. Føreid Merkel; C. T. Langdon; J. Bakke; T. Åm; T. G. Brown</td>
<td>The LGM ice-free Andøya island - did local favourable condition combined with distinct long-distance dispersal routes cause non-analogue vegetation?</td>
</tr>
<tr>
<td>D. Faust; C. Richter; D. Wolf; C. Roettig</td>
<td>Some appear, some adapt, some die stratigraphy by means of quaternary guide assemblages of land snails.</td>
</tr>
<tr>
<td>D. Faust; C. Richter; D. Wolf; C. Roettig</td>
<td>Some appear, some adapt, some die stratigraphy by means of quaternary guide assemblages of land snails.</td>
</tr>
<tr>
<td>J. Singarayer</td>
<td>Impacts of glacial-interglacial climate change on ecosystem structure in a global mechanistic ecosystem model</td>
</tr>
<tr>
<td>A. Jeltsch-Thömmes; G. Battaglia; P. Joos</td>
<td>Glacial-Interglacial Variations in the Carboncycle</td>
</tr>
<tr>
<td>R. Rhodes; E. Brook; J. McConnell; T. Blunier; L. Sime; X. Fain; R. Mulvaney</td>
<td>Atmospheric methane variability: Multi-centennial scale signals in the Last Glacial Period</td>
</tr>
<tr>
<td>C. Nehrbass-Ahles; J. Shin; L. Schmieder; J. Schmitt; B. Berlefer; G. Teste; J. Chappellaz; T. Stocker; H. Fischer</td>
<td>Millemial scale atmospheric CO2 variability during Marine Isotope Stage (MIS) 9-11</td>
</tr>
<tr>
<td>C. Buizert; J. Severinghaus</td>
<td>Dispersion in deep polar firn driven by synoptic-scale surface pressure variability</td>
</tr>
<tr>
<td>M. Dyonisius; V. Petrenko; A. Smith; B. Hmiec; I. Vimont; Q. Hua; J. Menkinger; J. Beck; B. Seth; E. Brook; J. Severinghaus</td>
<td>High methane output from northern lakes during warm early Holocene</td>
</tr>
<tr>
<td>J. Singarayer</td>
<td>Impacts of glacial-interglacial climate change on ecosystem structure in a global mechanistic ecosystem model</td>
</tr>
<tr>
<td>M. van Hardenbroek; M. Woolser; P. Langdon; M. Edwards</td>
<td>High methane output from northern lakes during warm early Holocene</td>
</tr>
<tr>
<td>A. Buffen; J. Menkinger; E. Brook; T. J. Fudge; J. Fegyveresi; C. Buizert</td>
<td>A new Holocene 813C-CO2 record from the South Pole ice core</td>
</tr>
<tr>
<td>J. S. Edwards; E. J. Brook; J. E. Lee</td>
<td>Determining the imprint of Heinrich Stadials 4 and 5 on the latitudinal distribution of methane sources using the inter-polar methane difference from the WAIS Divide and GISP2 ice-cores</td>
</tr>
<tr>
<td>Y. Contreras-Pacheco; J. Herguera-Garcia; J. Quintanilla-Terminel</td>
<td>Atmospheric carbon invasion in the meridional border of California current: the last three decades</td>
</tr>
<tr>
<td>P. Köhler; C. Nehrbass-Ahles; J. Schmitt; B. Hmiec; H. Fischer</td>
<td>Continuous records of the atmospheric greenhouse gases CO2, CH4, and N2O and their radiative forcing since the penultimate glacial maximum</td>
</tr>
<tr>
<td>M. Rani; P. Kumar; H. Joshi</td>
<td>Water resources and changing climate in Indian Himalayan Region</td>
</tr>
<tr>
<td>V. Margaryan</td>
<td>The challenges of rational use and protection of groundwater resources the arid region of Ararat Valley in the context of climate change</td>
</tr>
<tr>
<td>A. Stone; A. Smith</td>
<td>Records of precipitation variation in the southern Kalahari and assessment of the origin and fate of nitrate in the unsaturated zone of the Stampriet Basin.</td>
</tr>
<tr>
<td>J. Gurdak</td>
<td>Climate variability signals in groundwater from U.S. agroecosystems</td>
</tr>
<tr>
<td>P. Deschamps; B. Hamelin; J. Goncalves; C. Bouchet; F. Hadj Ammar; A. Mahamat Nour; J. Petersen; C. Poulin</td>
<td>Recharge and Paleorecharge of Saharan and Sahelian Aquifers: the 36Cl perspective</td>
</tr>
<tr>
<td>V. Raidla; W. Werner; T. Weisbach</td>
<td>Noble gases in the Cambrian-Vendian aquifer system in Estonia</td>
</tr>
<tr>
<td>C. An; Y. Zhao; J. Zhao</td>
<td>Dust records during 38-15 kyr BP in arid Central Asia and its connection with abrupt climate events in the Northern Hemisphere</td>
</tr>
<tr>
<td>G. Garcia-Castrillo; E. Terradellas; S. Basart</td>
<td>Dust deposition forecasts at the Barcelona Dust Forecast Center</td>
</tr>
<tr>
<td>J. J. Dömming; M. Nylander; S. Hansson; R. Bindler</td>
<td>An 8.3ka paleo-dust deposition record from southern Sweden inferred from geochemical methods coupled with mineralogical identification by X-ray diffraction analysis</td>
</tr>
<tr>
<td>F. Lambrecht; A. Ridgwell; K. Kohfeld; G. Winckler; F. Lamy; G. Shaffer; N. Opazo</td>
<td>Spatial distribution and Timing of Dust-Induced CO2 Drawdown during the Last Termination</td>
</tr>
</tbody>
</table>
Thursday 11th May 2017

3D numerical simulation of a dust storm past Downtown Dubai (United Arab Emirates, UAE)

A multi-annual time series of north Red Sea dust loads and their chemical composition: provenance, impact on marine biogeochemical cycles and implications for paleo-dust reconstructions

Preliminary magnetic evaluation of air quality monitoring in north-east Spain (DONAIRE Project)

The DONAIRE project “Atmospheric deposition in natural and anthropized environments over northeastern Spain: integrated geochemical and magnetic characterization”: first results

Testing the potential of Pinus roxburghii and P. wallichiana in the dry interior of eastern Nepal as hydroclimatic proxies

Global changes during MCA and LIA: From temperature to hydroclimate

Contextualizing drought in Medieval Italy: A case-study of the 1302-04 CE events in Siena

Precipitation, temperature, and teleconnection signals across the combined North American, Monsoon Asia, and Old World Drought Atlases

Storm-scale variations of water isotopes in the Tropical High Andes: Using observations and modeling to improve ice core paleoclimate reconstruction

Challenges in climatic reconstructions using tree-ring data in Volga region: streamflow and PDSI

Past Asian Monsoon circulation from tree-ring isotopes and proxy system models

Strip-bank morphology and radial growth trends: Considerations for hydroclimatic reconstructions

Climatic signal in the new ring width chronology network in the East-European Plain

Reconstructing the global atmosphere-ocean dynamics of hydroclimate extremes with data assimilation

A high resolution record of diatom variability (Lake Vichuquén, central Chile) during the last millennium

Climate and drought over the past 1000 years in the Last Millennium Reanalysis

Paleoenvironmental DNA of bacteria as biological proxies for sea level reconstruction

Exploring ancient DNA as a sea ice proxy

Ancient DNA from subfossil wood in the Tropical Andes of Colombia

Long term plant community changes in two lake catchments in the Western Alps: a study based on lake sediment DNA

Abundance-based and phylogenetic diatom diversity obtained from recent and ancient sedimentary DNA of Arctic treeline lakes

PaleoDNA in paleoecology across climate zones

Origin of the first Scots pine (Pinus sylvestris) trees in north central Sweden: insights from aDNA analyses
### Friday 12th May 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 - 13:00</td>
<td><strong>Mozart Room</strong></td>
<td>Regional and transregional climate variability over the last 2000 years</td>
</tr>
<tr>
<td>11:00</td>
<td>K. Anchukaitis; R. Wilson; J. Tierney; A. LeGrande; NTREND Consortium; PAGES2k Oceans2k IHR</td>
<td>Common Era temperature reconstructions and the response of the climate system to explosive volcanic eruptions</td>
</tr>
<tr>
<td>11:15</td>
<td>S. Stevenson; K. Cobb; B. Powell; M. Merrifield; J. Nusbaumer</td>
<td>Constraining El Nino Properties Throughout the Last Millennium Using Improved Forward Models</td>
</tr>
<tr>
<td>11:30</td>
<td>C. Dätwyler; R. Neukom; M. Grosjean; R. Villalba; A. Gallant; M. Jacques-Coper; D. Karoly</td>
<td>Instabilities of the SAM teleconnection and implications for SAM reconstructions over the past Millennium</td>
</tr>
<tr>
<td>11:45</td>
<td>B. Dixon; J. Tyler; B. Henley; A. Lorrey; I. Goodwin; J. Gergis; R. Drysdale</td>
<td>A multi-archive, multi-tiered reconstruction of southeastern Australian hydroclimate variability over the past 1200 years</td>
</tr>
<tr>
<td>12:00</td>
<td>V. Novello; F. Cruz; M. Vuille; H. Cheng; R. Lawrence Edwards; I. Karmann</td>
<td>South American Monsoon System over the last 2000 years recorded in stalagmites from central South America</td>
</tr>
<tr>
<td>12:15</td>
<td>N. Scroxton; S. J. Burns; D. McGee; B. Hardt; L. R. Godrey; L. Ranivoharimanana; P. Faina</td>
<td>Hemispherically in-phase precipitation variability over the last 1700 years using stalagmites from Madagascar</td>
</tr>
<tr>
<td>12:45</td>
<td>K. Elaine Lin; P. K. Wang; Y. Liao; S. Lee; H. Liao; P. Pai; I. Fan</td>
<td>Temporal-spatial climate variations during 17th-19th centuries using Chinese chronological records</td>
</tr>
</tbody>
</table>

### MOZART ROOM

**Regional and transregional climate variability over the last 2000 years**

*Conveners: H. Goosse and N. Abram; Chairs: B. Martrat, S. J. Phipps, H. McGregor*
Friday 12th May 2017

15:00  **D. Kaufman; C. Routson; N. McKay; H. Beltrami; F. Jaume-Santero; B. Konecky; C. Saenger; B. Shuman**
Arctic temperature and moisture trends during the past 2000 years -Progress from multiproxy-paleoclimate data compilations

15:15  **R. Rhodes; X. Yang; E. Wolff; J. McConnell**
Sea ice as a source of sea salt aerosol to Greenland ice cores: a model-based study

15:30  **N. Gerasimenko**
The 2000-year history of climatic change in the steppe of Ukraine, based on a high-resolution study of the varves of Lake Saki

15:45  **B. Martrat; MedOC2k team, 2k Consortium, phase 3**
Land-ocean pre- and post-industrial climate variability in the Europe/Mediterranean paleo-archive: unique, similar or unlike the global context

16:00  **S. P. Harrison; G. Li; I. C. Prentice**
Tree growth and productivity during the Last Millennium: a forward modelling approach for data-model comparisons

16:15  **J. Jungclaus; R. Ghosh; R. Hand; W. Mueller; S. Wagner**
Modulation of summer climate variability over Europe during the Common Era

16:30  **D. Thornalley; D. Oppo; J. Robson; P. Ortega; P. Moffa-Sanchez; I. Hall; L. Keigwin; N. Rose**
A shift to a modern weaker state of Labrador Sea convection and AMOC at the onset of Industrial Era

16:45  **S. Rahmstorf; L. Caesar; F. Georg**
AMOC history: subpolar Atlantic cooling linked to warming off the US coast
11:00  **H. Fischer:** and the NEEM aerosol consortium
Response of northern hemisphere environmental and atmospheric conditions to (rapid) climate changes using Greenland aerosol records from the Eemian to the Holocene

11:15  **P. Hopcroft; P. Valdes**
Dust as a tracer of, and feedback on glacial abrupt climate change

11:30  **R. Greenop; A. Burke; J. Rae; D. Nita; P. Reimer; A. Crocker; T. Chalk; S. Barker; P. Knutz; I. Hall**
Improving estimates of surface water radiocarbon reservoir ages in the northeastern Atlantic Ocean.

11:45  **W. Gray; J. Rae; A. Shevenell; R. Wills; G. Foster; C. Lear; B. Taylor; M. Sarthein**
Circulation control on primary productivity and CO2 in the subarctic Pacific over the last deglaciation: evidence from boron isotopes in planktonic foraminifera

12:00  **A. Barth; P. Clark; J. Clark; S. Marcott; M. McCabe; J. Cuzzone; P. Dunlop; M. Caffee**
Persistent millennial-scale cirque-glacier fluctuations in Ireland between 24,000 and 10,000 years ago

12:15  **R. Wang; H. Kuehn; R. Gersonde; B.K. Biskaborn; G. Kuhn; B. Diekmann**
Provenance and dispersal of terrigenous sediments in the Bering Sea slope: Implications for late glacial land-ocean linkages

12:30  **U. Mikolajewicz; F. Ziemen; M. Kapsch; V. Meccia**
Simulating the last glacial-interglacial transition with a coupled atmosphere-ocean-ice sheet model

12:45  **A. Condron; J. Hill**
Low latitude iceberg scours record massive deglacial outburst floods

**"Lunch time (Multiusos room/Lunch Area)"**

15:00  **A.J. Joyce; A. Condron; R. Bradley**
Arctic sea ice export events as a driver of past abrupt climate change

15:15  **I. Garcia-moreiras; N. Martinez-Carreno; S. Garcia-Gil; C. Munoz Sobrino**
Impact of abrupt climate changes on the coastal ecosystems of the Rias Baixas (NW Iberia) during the Late-glacial/early Holocene transition

15:30  **G. Florescu; S. Veski; A. Feurdean**
Holocene rapid climate changes reflected in NE and CE European charcoal records

15:45  **G. Ramstein; D. Defrance; S. Charbit; M. Vrac; M. Adjoua Famien; B. Sultan; D. Swingedouw; C. Dumas; F. Gemenne; J. Alvarez Solas; J.P. Vanderlinden; C. Caminade**
Population and Heath vulnerability

**LUIS GALVE ROOM**

**The Holocene – its climate variability and rapid transitions**

*Conveners: R. S. Bradley and H. Wanner; Chairs: R. S. Bradley; H. Wanner*

16:00  **INVITED TALK S. Marcott; J. Marsicek; C. Rouston; J.Shakun; D. Kaufman; N. Mckay**
Holocene Climate Change: A Data Perspective

16:15  **G. Lohmann; M. Ionita; P. Scholz; X. Shi; M. Pfeiffer**
Holocene climate variability and trends: data and models

16:30  **F. Georgiadis; N. El Bani Altuna; J. Giraudeau; G. Massé; F. Eynaud; S. Zaragosí; G. St-Onge; P. Martinez**
The post-glacial opening of Naars Strait, NW Greenland: new details on ice-sheet and sea ice dynamics.

16:45  **P. Lecavalier; D. Fisher; G. Milne; B. Vinther; L. Tarasov; P. Huybrechts; D. Lacelle; B. Main; J. Zheng; J. Bourgeois; A. Dyke**
A Holocene temperature record from the Agassiz ice cap: Implications for high-Arctic climate change and Greenland ice sheet evolution
## MARIANO GRACIA ROOM

**Climate of Quaternary Interglacials from observations and model simulations**

**Conveners:** A. Govin, E. Capron, N. Bouttes and M. F. Sanchez Goñi  
**Chairs:** E. Capron, M. F. Sanchez Goñi, A. Govin, M. Holloway

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>INVITED TALK M. Crucifix; Q. Yin; A. Berger</td>
<td>Astronomical and CO2 controls on the interglacial climates of the last 800,000 years</td>
</tr>
<tr>
<td>11:15</td>
<td>M. Haeberli; D. Baggenstos; T. Kellerhals; J. Schmitt; H. Fischer; S. Shackleton; J. Severinghaus</td>
<td>Reconstruction of Eemian mean ocean temperature using ice core noble gas thermometry</td>
</tr>
<tr>
<td>11:30</td>
<td>M. Holloway; L. Sime; J. Singarayer; J. Tindall; P. Bunch; P. Valdes</td>
<td>Antarctic Last Interglacial Isotope Peak in Response to Sea Ice Retreat not Ice Sheet Collapse</td>
</tr>
<tr>
<td>11:45</td>
<td>N. Barlow; E. McClymont; P. Whitehouse; C. Stokes; S. Jamieson; M. Bentley; L. Callard; D. Evans; J. Horrocks; J. Lloyd; A. Long; M. Margold</td>
<td>Can ice sheets regrow during an interglacial?</td>
</tr>
<tr>
<td>12:00</td>
<td>I. Tabone; A. Robinson; J. Álvarez-Solas; M. Montoya</td>
<td>Sensitivity of the Greenland Ice Sheet to oceanic changes in the last 150 kyrs</td>
</tr>
<tr>
<td>12:15</td>
<td>M. Luetscher; G. E. Moseley; P. Hof; C. Spötl; R. Lawrence Edwards</td>
<td>A high-resolution speleothem record of the last interglacial (MIS-5e) in the Northern Alps</td>
</tr>
<tr>
<td>12:30</td>
<td>J. Dabkowski; N. Limondin-Lozouet; P. Antoine; J. Andrews</td>
<td>Comparing climatic variabilities and intensities of Quaternary Interglacials using stable isotopes in NW European calcareous tufa deposits from MIS11, MIS5 and the Holocene</td>
</tr>
<tr>
<td>12:45</td>
<td>C. Breant; A. Landais; P. Martinerie; A. Orsi; N. Caillon; J. Severinghaus</td>
<td>Climate dynamic of Terminations 2 and 3 in East Antarctica as inferred from the combination of water and air isotopes in Dome C and Vostok ice cores</td>
</tr>
</tbody>
</table>

**"Lunch time (Multiusos room/Lunch Area)"**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td>T. Felis; W. M. Brocas; J. Christina Obert; P. Gierz; G. Lohmann; D. Scholz; M. Kölling; M. Pfeiffer; S. R. Scheffers</td>
<td>Last interglacial temperature seasonality reconstructed from tropical Atlantic corals</td>
</tr>
<tr>
<td>15:15</td>
<td>K. Delong; G. Ouellette; N. Goodkin; E. Martin; D. Rosenthal; F. Taylor; C. Shen</td>
<td>Last Interglacial Decadal to Seasonal Temperature Variability in the Tropical Atlantic Warm Pool: Comparison of Model and Coral-Based Reconstructions</td>
</tr>
<tr>
<td>15:30</td>
<td>A. Torfstein; A. Hartman; A. Almogi-Labin</td>
<td>A meridional shift of the tropical rain belt across the Red Sea during MIS5e</td>
</tr>
<tr>
<td>15:45</td>
<td>Y.Kiro; S. Goldstein; Y. Kushnir; B. Lazar; M. Stein</td>
<td>The significance of orbital forcing in Eastern Mediterranean climate during the last interglacial</td>
</tr>
<tr>
<td>16:00</td>
<td>J. M. Link; P. Blaser; J. Lippold; M. Gutjahr; A. H. Osborne; E. Böhlm; M. Frank; O. Friedrich; N. Frank</td>
<td>The Atlantic Deep Circulation During Interglacial MIS 11</td>
</tr>
<tr>
<td>16:15</td>
<td>D. Mcgee; N. Biller; J. Shakun; B Hardt; C. Gambino; D. Ford; B. Lauriol</td>
<td>Pleistocene Permafrost Thawing History of the North American Arctic Cordillera from U-Th and U-Pb Dating of Cave Speleothems</td>
</tr>
<tr>
<td>16:30</td>
<td>C. Morales Del Molino; T. Rodrigues; S. Desprat; G. M. Martin-García; F. J. Sierro; D. A. Hodell; M. F. Sánchez Goñi</td>
<td>Unravelling western Mediterranean vegetation and climate during a past interglacial with reduced Arctic sea ice cover (MIS 15)</td>
</tr>
<tr>
<td>16:45</td>
<td>D. Oliveira; M. F. Sánchez Goñi; F. Naughton; J. M. Polanco-Martinez; F. J. Jimenez-Espejo; J. O. Grimalt; B. Martrat; A. H.L. Voelker; R. Trigo; D. Hodell; P. Abrantes; S. Desprat</td>
<td>Unexpected weak seasonal climate in the western Mediterranean region in response to MIS 31, a high-insolation forced interglacial</td>
</tr>
</tbody>
</table>
Friday 12th May 2017

### HOTEL ROMAREDA-ROOM1
Disturbance dynamics across spatial and temporal scales: fire, wind, pathogens and post-disturbance run off as drivers of environmental changes

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>B. V. Vanniere; the GPWG</td>
<td>The Global Paleofire Working Group (GPWG2) &amp; Global Charcoal Database (GCD)</td>
</tr>
<tr>
<td>11:15</td>
<td>L. Dupont; E. Schefuß</td>
<td>Fire in northern West Africa during the Holocene</td>
</tr>
<tr>
<td>11:30</td>
<td>G. Van Der Plas; D. Colombaroli; D. Verschuren</td>
<td>Determinants of savanna ecosystem dynamics in the Kenya Rift Valley</td>
</tr>
<tr>
<td>11:45</td>
<td>T. Brücher; A. L. Laniau; G. Lasslop</td>
<td>Fire dynamics over the last glacial cycle in South Africa</td>
</tr>
<tr>
<td>12:00</td>
<td>H. Cadd; M.-Shawn Fletcher; H. Hendrik; P. Gadd</td>
<td>Fire in Tasmania’s endemic rainforests: recovery governed by frequency and topography</td>
</tr>
<tr>
<td>12:15</td>
<td>K. Hapsari; S. Biagioni; T. Jennerjahn; P. Reimer; A. Saad; S. Sabiham; H. Behling</td>
<td>Human disturbance and resilience of a tropical peatland in Sumatra, Indonesia</td>
</tr>
<tr>
<td>12:30</td>
<td>J. Kaplan</td>
<td>Fire and land cover change during the Maori colonization of New Zealand: Hypothesis testing with model simulations and charcoal data</td>
</tr>
<tr>
<td>12:45</td>
<td>B. Leys; F. Higuera; K. McLauchlan; P. Dunnette</td>
<td>Wildfires and geochemical change in a subalpine forest over the past six millennia</td>
</tr>
</tbody>
</table>

"Lunch time (Multiusos room/Lunch Area)"

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td>A.N. Dabengwa; J. MacPherson; L. Gillson; T. Hoffman</td>
<td>Between- and within-biome resilience at the fynbos-forest boundary, south africa</td>
</tr>
<tr>
<td>15:15</td>
<td>N. Kuosmanen; J. Clear; V. Čada; N. Schafstall; R. Chiverrell; V. Carter; P. Kune</td>
<td>Disturbance dynamics in montane spruce forests in Central Europe: an integration of dendrochronological and palaeoecological records</td>
</tr>
<tr>
<td>15:30</td>
<td>P. Kune; V. Abraham; T. Herben</td>
<td>Post-glacial disturbance dynamics in temperate ecosystems revealed from pollen records</td>
</tr>
<tr>
<td>15:45</td>
<td>E. Dietze; M. Słowiński; E. C. Hopmans; L. T. Schreuder; M. Obremska; A. Pieńczewska; O. Blarquez; F. Ott; D. Brykala; S. Schouten; A. Brauer</td>
<td>Local accidental fires during the industrialization of northern Poland revealed by fire biomarkers in varved lake sediments</td>
</tr>
<tr>
<td>16:00</td>
<td>K. Marcisz; D. Colombaroli; V. E. J. Jassey; W. Tinner; P. Kolaczek; M. Galka; M. Karpinska-Kolaczek; M. Słowiński; M. Lamentowicz</td>
<td>Tiny but powerful - the use of functional traits of testate amoebae as disturbance indicators in palaeoecological studies of peatlands</td>
</tr>
<tr>
<td>16:15</td>
<td>C. Molinari; V. Lehsten; O. Blarquez; J. Clear; C. Carcaillet; R. H.W. Bradshaw</td>
<td>Boreal forests fires: climate / vegetation / human interactions during the Holocene</td>
</tr>
<tr>
<td>16:30</td>
<td>G. Sangüesa-barreda; J. Julio Camarero; U. Büntgen</td>
<td>Long-term growth and establishment dynamics of high elevation Pyrenean forests</td>
</tr>
<tr>
<td>16:45</td>
<td>I. Jouffroy-bapicot; B. Vannière; T. Pedrotta; V. Iglesias; M. Debret; P. Sabatier</td>
<td>Socio-ecological trajectories and tipping-points in the making of the Cretan landscape (Greece) from Neolithic to Present day</td>
</tr>
<tr>
<td>Time</td>
<td>Title</td>
<td>Authors</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11:00</td>
<td>Cultural transformation of the Swedish boreal forest over two millennia and its impact on lake-water quality</td>
<td>R. Bindler; C. Meyer-Jacob; S. Ninnes; J. Tolu; E. Myrstener; J. Rydberg</td>
</tr>
<tr>
<td>11:15</td>
<td>Timing and causes of the spread of lacustrine hypoxia revealed by varved sediments</td>
<td>P. Francus; J. P. Jenny; A. Normandeau; Z. Ecaterina Taranu; I. Gregory-Eaves; F. Lapointe; J. Jautzy; A. E. K. Ojala; J. M. Dorio; M. E. Perga; A. Schimmelman; B. Zolitschka</td>
</tr>
<tr>
<td>11:30</td>
<td>The Sediment Record of human activities in Lake Enol (Picos de Europa National Park, Northern Spain)</td>
<td>M.P. Mata; M. Morellón; J. Vegas; J. Sánchez España; A. Moreno; J. A. Rodríguez-García; A. Navas; Á. Salazar; J. Pry; B. Valero-Garcés</td>
</tr>
<tr>
<td>11:45</td>
<td>Impact of eutrophication and climate change on cyanobacterial diversity across European pre-alpine lakes over 150 years</td>
<td>M.E. Monchamp; P. Spaak; I. Domaizon; N. Dubois; F. Pomati</td>
</tr>
<tr>
<td>12:00</td>
<td>Combining subfossil Chironomidae and Cladocera remains to evaluate the effect of fish introductions on palaeolimnological records in mountain lakes</td>
<td>G. De Mendoza; L. Millet; D. Rius; A. Simonneau; G. Ollier; M. Philippe; D. Galop</td>
</tr>
<tr>
<td>12:15</td>
<td>Operational assessment of regime shifts: application to the long-term ecological trajectory of a hollow lake under multiple forcings</td>
<td>R. Bruel; A. Marchetto; A. Bernard; A. Lami; P. Sabatier; V. Prossard; M. E. Perga</td>
</tr>
<tr>
<td>12:30</td>
<td>Ecosystem responses to anthropogenic changes in a tropical flood pulse wetland, Tasik Chini (Malaysia)</td>
<td>S. Enghs; C. Bridgon; S. Chenery; C. JB Gowing; M. J Leng; S. McGowan; K. Mills; I. Mushrifah; V. M. Panizzo; M. Shafigh; C. Vane; H. Yang</td>
</tr>
<tr>
<td>12:45</td>
<td>An Integrated Habitat and Land Cover Change Approach for the Lake Victoria Watershed in Eastern Africa</td>
<td>C. Twesigye</td>
</tr>
<tr>
<td>15:00</td>
<td>Mean ocean temperature evolution in the past 40,000 years from ice core noble gas thermometry</td>
<td>D. Baggenstos; M. Haeberli; T. Kellerhals; J. Schmitt; H. Fischer</td>
</tr>
<tr>
<td>15:15</td>
<td>Testing the analog method for reconstructing climate over the last 15000 years</td>
<td>O. Bothe</td>
</tr>
<tr>
<td>15:30</td>
<td>Hadley Circulation extent and width in a wide range of simulated climates</td>
<td>R. D’agostino; O. Adam; P. Lionello; T. Schneider</td>
</tr>
<tr>
<td>15:45</td>
<td>British-Irish ice sheet sustained by weaker Atlantic Meridional Overturning Circulation</td>
<td>P. Bakker; M. Prange; I. Rogozhina; M. Kucera; A. Paul; M. Schulz; J. Sequinot</td>
</tr>
<tr>
<td>16:00</td>
<td>Anthroecology and Anthromes: Theoretical and Practical Tools for the Study of Anthropogenic Global Change</td>
<td>E. Ellis</td>
</tr>
<tr>
<td>16:15</td>
<td>Past vegetation changes in the context of land use and late Holocene expansion of the Jê pre-Columbian culture in Southern Brazil</td>
<td>M. Cárdenas; F. E. Mayle; J. Iriarte; J. Gregorio de Souza; P. Ulguim; M. Robinson; R. Corteletti; P. DeBiasi</td>
</tr>
<tr>
<td>16:30</td>
<td>Hydroclimate forcing of deglacial landscape and ecosystem changes in the American southwest</td>
<td>T. Shanahan; N. McKay</td>
</tr>
<tr>
<td>16:45</td>
<td>A global perspective on the change in climate variability from the Last Glacial Maximum to the Holocene</td>
<td>K. Rehfeld; T. Münch; S. Ling Ho; L. Thomas</td>
</tr>
</tbody>
</table>
OPEN

73  K. Ashastina; F. Kienast; L. Schirrmeister; S. Kuzmina; N. Rudaya
The Batagay mega thaw slump reveals the Late Pleistocene history of inland West Beringia

74  Z. Liu; J. Guan; X. Wen; E. Brady; D. Noone; J. Zhu; J. Han
Understanding the temporal slope of the temperature-water isotope relation: The slope equation

75  F. Dassié; A. Hasson; M. Khodri; B. Linsley
Spatio-temporal variability of the SPCZ fresh pool eastern front from coral-derived surface salinity data

76  V. Rull; M. C. Trapote; E. Safont; M. Canellas-Boltà; M. Pérez-Zanón; J. Sigró; T. Buchaca; T. Vegas-Vilarribau
Seasonal patterns of pollen sedimentation in a Pyrenean varved lake (Montcortès): applications to high-resolution paleoecology

77  E. Zorita; E. Wahl; J. Gómez-Mávarro; C. Raible
The analog method as a proxy-data assimilation technique: comparison with off-line Bayesian methods

78  N. Anisimov
Paleolakes reconstruction in the southeastern Scandinavian ice sheet edge

79  Y. Bai; J. Chen; M.-A. Sicre; H. Jin; H. Li; Z. Ji; Y. Zhuang; V. Klein; M. Zhao
Seasonal variability of biomarker flux in the Chukchi Sea (Western Arctic) and their relevance for sea-ice cover reconstruction

80  K. Helmens; C. Katrantsiotis; S. Engels; N. Kuosmanen; T. Luoto; S. Salonen; M. Välimänta; J. Weckström
Warm summers and rich biotic communities during n-hemisphere deglaciation

81  K. Küssner; M. Sarnthein; R. Tiedemann; F. Lamy; S. Balmer
Distortion of radiocarbon-based age records by Zoophycos burrows

82  R. S. Avery; C. Xuan; A. E. S. Kemp; J. M. Bull; C. J. Cotterill; J. J. Fielding; R. B. Pearce; I. W. Croudace
A new Holocene record of geomagnetic secular variation from Windermere, UK, and a new northern North Atlantic geomagnetic reference curve

83  E. Brown; M. Caballero-Miranda; P. Fawcett; S. Lozano-García; B. Ortega-Guerrero; A. Schwalb; V. Smith; M. Stockhecke; B. Valero-Garcés; S. Watt; R. S. Avery
MexiDrill, the Basin of Mexico Drilling Project: Exploring a lacustrine record of climate, volcanism and environmental change in subtropical North America since the mid-Pleistocene

84  S. Chua; A. Switzer
A high-resolution geological model for central Sundaland: Quaternary Stratigraphy of the Kallang River Basin, Singapore

85  B. Birner; C. Buizert; J. Severinghaus
The influence of high-density layering on firn air transport in a 2D model

86  M. de la Fuente; L. Skinner; A. Sadekov; E. Freeman; A. Scrivner; S. Souane-Ureta
Biogeochemical fingerprints of marine carbon pump variability in the glacial ocean

87  A. Mehl; F. Lorenzo; M. Zárate
The Auel river basin, central-west Argentina: a present-day anthropically modified system

88  P. Köhler
Using the Suess effect on the stable carbon isotope to distinguish the future from the past in radiocarbon

89  M. Heikila; S. Ribeiro; A. Limoges; M. Sejr; K. Weckstrom; G. Massé
Tracers of sea ice, primary production and terrigenous inputs: distribution of biogenic proxies in a High Arctic fjord system, Northeast Greenland

90  C. Mayr; V. Bachadse; B. Brandlmair; V. Diersche; S. Eckert; L. Hedenäs; U. Kirscher; B. Lempe; R. Matzke-Karas; P. Reimer; C. Spötl; P. Stojakowits et alii
Climate and environment in the northern Alps during the last glacial - first results from the Hesseltalgraben palaeoake in southeastern Germany

91  S. Pla-Rabes; J. Catalan
A long-term progressive accumulation of benthic and planktonic diversity in a mountain lake recurrently peaks during the Holocene cold spells

92  A. Dolman; T. Laepple
Quantifying uncertainty in sediment-archived climate proxies over decadal to millennial timescales using proxy system modelling

93  L. Comas-Bru; M. Deininger; S. Harrison; M. Bar-Matthews
SISAL: A community-driven initiative to create a global database of speleothem data for model evaluation

94  T. Kunz; T. Laepple
On the relation between local and global variability - a key issue for proxy record interpretation

95  K. Zhang; G. Kattel; X. Yang; R. Wang; X. Dong
Why Resilience and Transformation Centre in China?

96  M. Jahadi Toroghi
The Study of Glacio-paleoflood slack water deposits and landforms in Shehezar River, Iran

97  F. Muthreich
New technical and methodological development in past global changes
Friday 12th May 2017

98  L. Hernández-Almeida; G. Cortese; M. Chen; P.-S. Yu; M. Kucera
    A new Western Pacific radiolarian-based transfer function for reconstructing winter sea surface temperatures in East Asian marginal seas

99  R. Wilson; R. D’Arrigo; L. Andreu Haynes; R. Oehlerks; G. Wiles; K. Anchukaitis; N. Davi
    Blue intensity based experiments for reconstructing North Pacific temperatures along the Gulf of Alaska

100 L. Motta; J. Massaferro; A. Ruggiero
    Importance of site-specific variables other than temperature in shaping chironomid composition and distribution: implications for climate and environmental reconstructions.

101 M. Aguayo Arias; R. Lobos Saez; A. Aranda Castillo; A. Stehr Gesche; F. Torrejón Godoy
    Linking Climate Change and Altitudinal Variation of the Andean Vegetation during the last three decades in South-Central Chile.

102 P. Braconnot; M. Kageyama; S. Harrison; O. Martí; P. O. Hopcroft; W. R. Peltier; L. Tarasov
    The PMIP4 Last Glacial Maximum experiments

103 P. Kumar; M. Rani
    Monitoring of Ice Sheet Dynamics Change and their Assessment using LANDSAT and Sentinel-2 Sensors Time Series Data

104 I. Carmi; J. Kronfeld
    A 7500 year history of El Niño-Southern Oscillation variability derived from a quantitative Australian precipitation record

105 E. Dolgova; O. Solomina
    Climatic signal inferred from multiple tree-ring parameters of Scots Pine (Pinus sylvestris L.) in the central sector of Russian Plain.

106 A. Medialdea; M. Bartolomé; C. Sancho; M. Calle; G. Benito; M. Leunda; A. Moreno; R. Lawrence Edwards; H. Cheng
    Geomorphological significance of fluvial deposits in the Granite Cave (Bujaruelo Valley, Central Pyrenees)

107 S. Panedy; B. W. Scharf
    Holocene evolution of mangrove vegetation in relation to palaeoclimate and sea level changes at the Chilka Lagoon, Odisha, India

108 M. Liao; G. Yu; Y. Guo
    Eutrophication in Poyang Lake (Eastern China) Over the Last 300 Years in Response to Changes in Climate and Lake Biomass

109 A. Garcia-Escárraga; I. Gutierrez-Zugasti; D. Cuenca-Solana; A. Cobo; J. Martin-Chivellet; M. R. González-Morales
    Looking for the B.2ka event: environmental conditions derived from oxygen stable isotopes on mollusc shells during the Early Holocene in northern Iberia

110 P. Bakker; P. U. Clark; N. R. Golledge; A. Schmittner; M. E. Weber
    Centennial-scale Holocene climate variations amplified by Antarctic Ice Sheet discharge
Friday 12th May 2017

**INTER**

155 A. Masi; G. Sinopoli; L. Sadori  
Paleontology discovers the plants responses to climate changes during the last interglacial complex at Lake Ohrid (FYROM/Albania)

156 A. S. Dalton; S. A. Finkelstein; P. J. Barnett  
Age and inferred paleoclimates from Pleistocene-aged deposits in the Hudson Bay Lowlands, Northern Canada

157 A. Govin; C. Kissel; C. Wandres  
Last Interglacial variability of the deep North Atlantic circulation

158 N. Vázquez Riveiros; L. Skinner; C. Waelbroeck; D. Roche; N. E. Bouttes  
Interglacial climate of MIS 7 and MIS 11 influenced by ocean circulation during preceding Terminations

159 R. Newingham; G. Dunbar; M. Ryan; M. McGlone; J. Wilmshurst  
Pollen climate reconstructions for three interglacials from New Zealand and their relevance to climate projections for the 21st century.

160 D. Oliveira; S. Desprat; T. Rodrigues; F. Naughton; D. Hodell; R. Trigo; F. Abrantes; M. F. Sanchez Goñi  
The complexity of millennial-scale cooling events in southwestern Europe during MIS 11

161 P. Marret; J. Prebble; E. Crouch; G. Cortese; H. Neil; H. Bostock  
Revisiting the Last Interglacial period in the SW Pacific: new palynological evidence

162 S. Pérez-Díaz; A. Cearreta; J. A. López-Sáez; E. Sainz de Murrieta; P. Cunha  
Vegetation dynamics and climate variability during the MIS-5 in the Northern Iberian coast: The palynological study of the Oyambre deposit.

163 P. Gierz; G. Lohmann; M. Werner; A. Govin; E. Capron  
Constraining the North Atlantic Summer Climate during the Early Last Interglacial

164 T. Alina; T. Piotr; G.-B. Elisabeth; M.-A. Seyed-Hani; L. Mohammad; A.-B. Hesam  
Lake Urmia (NW Iran) environmental and climate changes during the Holocene inferred from the lake deposits; preliminary results

165 M. Vääräinen; K. Helmens; S. Finkelstein; A. Dalton; P. Sarala; T. Eskola; N. Kuosmanen; S. Salonen  
Weichselian/Wisconsin interstadial climate and vegetation composition based on palaeobotanical data from northern Finland and Canada

166 C. Chen; T. Litt  
Dead Sea pollen reveal last interglacial environment of the southern Levant from Palaeobotanical perspective

167 R. Drysdale; J. Hellstrom; I. Couchoud; G. Zanchetta; E. Regattieri; P. Gierz; P. Bajo; E. Corrick; J. Woodhead  
A cross-hemispheric comparison of Last Interglacial climate variability using Italian and NZ speleothem records

168 J. S. Salonen; K. F. Helmens; M. Vääräinen; N. Kuosmanen; S. J. Goring; M. Luoto  
A high-resolution pollen and macrofossil sequence and climatic reconstruction of the Eemian Interglacial (MIS 5e) from northern Finland

169 L. Sime; P. Valdes; J. Tindall; I. Malmierca Vallet  
8 degrees C of Greenland warming? Ice cores and sea ice retreat during the Last Interglacial

170 B. Ottos-Blesner; E. Brady; R. Tomas  
The PHMIP4-CMIP6 Simulations for the Mid-Holocene and Last Interglacial with the Community Earth System Model

171 J. Torney; I. Cacho; A. Moreno; H.r Skolir; J. Rodriguez; C. Perez; J. Fornos; H. Chang; R. L. Edwards  
Climate variability during MIS 5 in NE Iberia and its surrounding seas

172 Q. Hao; L. Wang; F. Oldfield; Z. Guo  
Extra-long interglacial in Northern Hemisphere during MISs 15-13 and its influence on the second major dispersal of African hominins

173 I. Oyabu; K. Kawamura; K. Kitamura  
A revised chronology of the Dome Fuji ice core (80 to 165 ka) from O2/N2 of trapped air

174 T. Rodrigues; M. Belen; M. Casado; M. Alonso García; J. O. Grimalt; D. Hodell; F. Abrantes  
The Warmest Interglacials (MIS 5e and MIS 19) over the last 1Ma in SW Iberian Margin

175 B. L. Otto-Blesner; F. Bracconot; S. P. Harrison; D. J. Lunt; PAGES and PMIP4 Quaternary Interglacials Working Groups  
Two Interglacials: Scientific Objectives and Experimental Designs for Holocene and Last Interglacial Simulations in PMIP4 and CMIP6

176 E. Taldenkova; S. Nikolaev; E. Gusev; A. Stepanova; P. Rekant; Y. Osyepyan; N. Chistyakova; E. Novikhina; O. Rudenko; T. Klyuvitkina; M. Pyatkova; M. Mirolyubova  
A new long record of the Pleistocene glacial/interglacial environmental variability in the Amerasian Arctic Ocean (Pendelecy Ridge)

177 T. Pollard; R. Drysdale; J. Woodhead; I. Couchoud; M. Daérón; D. Blamart; J. Hellstrom; E. Regattieri; G. Zanchetta  
Radiometrically dated speleothem records of MIS 11c and other key Quaternary interglacials from Corchia Cave, central Italy

**IOL**

154 M. Allan; N. Fagel; S. Verheyden  
Belgian speleothem records Holocene cold events?

155 B. Song; H. Jia; W.-H. Nahm; J.-C. Kim; J. Lim; J.-Y. Lee  
Middle to late Holocene centennial-multidecadal climate change on the east coast of South Korea and possible influential factors

156 M. Döring; T. Kobashi; M. Leuenberger  
Automatization of an inverse surface temperature modelling procedure for Greenland ice cores, developed and evaluated using nitrogen and argon data measured on the Gisp2 ice core

157 B. Reilly; J. Stoner; A. Mix; M. Jakobsson; A. Jennings; M. Walczyk; L. Dyke; M. Cheseby; S. Albert; J. Wiest  
The Last Interglacial of the Petermann Glacial System, Northwest Greenland

158 M. Álvarez-Frugone; J. Polanco-Martinez; C. Latorre; A. Moreno; B. Valero-Garcés  
Differential response of Holocene climate variability observed from lake records along an elevational gradient in the intermediate latitudes of the Southern Hemisphere.
Friday 12th May 2017

149  V. Carter; P. Kunes; J. Clear
Drivers of vegetation change from the Sumava Region, central Europe in association with the 8.2 ka event.

148  M. Mojtahid; M. Durand; A. Penaud; P.-O. Coste; A. Ganne; H. Howa; J. Nizou; S. Toucanne
High resolution study of benthic foraminiferal community from the northern Bay of Biscay (northeastern Atlantic) over the past 7000 years: a look at climatic and oceanic forcing factors

147  B. Jalali; M.-A. Screte; N. Kallei; J. Azuara; N. Combournie-Nebout; M.-A. Bassetti; V. Klein
High-resolution Holocene climate and hydrological variability from the two major Mediterranean deltas (Nile and Rhone)

146  V. Rull; E. Montoya
Holocene vegetation dynamics in the Apakar summit of the neotropical Guayana Highlands

145  M. Reschke; K. Rehfell; T. Laepple
Spatial variability and signal content of Holocene temperature proxy records

144  Y.-H. Park; B.-K. Khim; Ma; Yamamoto; S. Kim; K.-C. Yoo; H.-I. Yoon
TEX86-derived temperature variability during the Holocene in the Huopo Basin of the southwestern East Sea (Sea of Japan)

143  X. Liu; Y. Sun; P. Cheng; Z. An
Abrupt winter monsoon changes on the western Chinese Loess Plateau since the last deglaciation

142  I. Matergo; L. J. Gregoire; R. Ivanovic; J. Tindall; A. Haywood
The 8.2 ka cooling event caused by Laurentide ice saddle collapse

141  J. Conroy; A. Hudson; J. Overpeck; K.-B. Liu; L. Wang; J. Cole
The primacy of internal variability over late Holocene forced change of the Asian monsoon on the southern Tibetan Plateau

140  J. Ren; J. Chen; L. Ran; H. Jin; Y. Bai
A diatom-based transfer function for quantitatively sea ice reconstruction in the western Arctic Ocean

139  A. Gong; G. Lohmann
Coherent changes of the Atlantic Meridional Overturning Circulation and North Pacific Intermediate water during Mid-to-late Holocene transition

138  J. M. Mesa-Fernández; G. Jiménez-Moreno; M. Rodrigo-Gámiz; A. García-Alix; R. Scott Anderson; F. J. Jiménez-Espejo
Paleoenvironment and climate evolution during the Holocene in Sierra Nevada (Southeastern Iberia)

137  A. García-Alix; F. J. Jiménez-Espejo; J. L. Toney; G. Jiménez-Moreno; M. J. Ramos-Román; R. Scott Anderson; P. Ruano; I. Queralt; A. Delgado Huertas
Increased sensitivity in S Spain alpine bogs after the Industrial Revolution: natural vs human-induced environmental change

136  M. J. Ramos-Román; G. Jiménez-Moreno; R. S. Anderson; A. García-Alix; J. Camuera; J. L. Toney; F. J. Jiménez-Espejo
Human impact during the Late Holocene based on vegetation reconstruction from alpine and montane peat bog sediment records from Sierra Nevada (southeastern Spain)

135  A.-C. Diaconou; M. Tóth; M. Lamentowicz; O. Heiri; I. Tanţău; A.-M. Panait; A. Feurdean
Hydroclimate history of the last 7500 years in the northern Carpathians, Romania

134  S. Lata Rawat; A. K. Gupta; F. S. Negi
Mid to late Holocene climate variability in the Garhwal Himalaya, India

133  I. Couchoud; R. Drysdale; J. C. Hellstrom; Y. Perrette
The 8.2 ka event recorded at high resolution by a speleothem from the Northern French Alps

132  M. J. Ramos-Román; G. Jiménez-Moreno; J. Camuera; A. García-Alix; R. S. Anderson; F. J. Jiménez-Espejo; J. L. Toney; D. Sachse
Late Holocene climate change in Southern Iberia through a high-resolution multi-proxy analysis from Padul peat bog (Sierra Nevada)

131  G. Leducci; L. Vidal; K. Tachikawa; C. Sonzogni; M. García; F. Rostek; Y. Fagault; E. Bard; J. Jacob; L. Beaufort; C. Waelbroeck; R. Schneider
Holocene hydrological changes in the Eastern Equatorial Pacific

130  S. Marcott; M. Reusche; E. Cerpeley; A. Barth; E. Brook; A. Mix; M. Caffee
Holocene glacialization of northwest Greenland

129  M. Toohy; C. Timmreck; J. Bader; V. Brovkin; M. Claussen; J. Juncclaus; S. Lorenz; H. Schmidt; M. Sigl; The Hamburg Holocene Group
A rudimentary Holocene volcanic forcing reconstruction and its climatic impacts in Earth system model simulations

128  S. J. Lorenz; V. Brovkin; M. Claussen; R. D’Agostino; A. Dallmeyer; J. Jungclaus; T. Raddatz; C. Timmreck; M. Toohy;
Hamburg Holocene Group
High-resolution transient simulations of Holocene climate with the MPI Earth system model, forcing and experiments

127  S. Alexander; F. Jeck; J. Scourse; P. Butler; B. Schöne; P. Reimer
Reconstructing Holocene hydrographic variability in the Northeast Atlantic using bivalves

126  A. Català; I. Cacho; J. Frigola; M. Canals
Holocene marine-atmosphere linkages in the western Mediterranean Sea

125  M. Dabhi; S. Bhandari; N. Chauhan; A. Shukla; N. Juyal
Reconstructing climate during Late Holocene: Decline of Pre-Historic site in Western Kachchh

124  C. S. Allen; J. Pike; A. R. Haworth; D. A. Hodgson
Spatial and temporal heterogeneity of Holocene ocean and climate conditions in the Antarctic Peninsula: evidence from a suite of marine diatom records.

123  J. Franke; R. Donner
Dynamical anomalies in North Atlantic climate variability during the last 2 ka as revealed by visibility graph analysis of terrestrial proxies

122  D. Thornalley; D. Oppo; P. Moffa-Sanchez; I. Hall; L. Keigwin; N. McCabe
Millennial scale variability of the AMOC and its link to climate during the Holocene

121  F. Rodriguez; M. M. Mahiques; R. C. L. Figueira; R. H. Nagai
Late Holocene Mg/Ca based sea surface temperature estimates for the SW Atlantic in the
Friday 12th May 2017

187  U. Herzschuh; X. Cao; T. Laepple; R. Telford; A. Dallmeyer
    Shifting and tilting of the westerly axis induced regionally contrasting Holocene rainfall pattern in China

188  R. Lloren; F. Siringan
    The influence of the ITCZ mean positioning in the precipitation variabilities during PDO events in the Sibuyan Basin, Philippines during the Holocene

189  R. Olga; B. Henning; Taldenkova E.; Ovsepyan V.; Venina V.; Stepanova A.
    Mid- and late Holocene environmental variability in Arctic Siberia: evidence from sediment core records from the Laptev Sea inner shelf adjacent to the Lena River Delta

184  P. Butler; J. Estrella-Martínez; J. Scourse
    An annually resolved marine proxy record for the 8.2K cold event from the northern North Sea

183  A. Moreno; M. Bartolomé; C. Pérez; C. Sancho; B. Valero-Garcés; P. González-Sampériz; A. Català; J. Frigola; I. Cacho; M. Morellón; B. Oliva; L. Edwards
    Reconstructing Holocene hydrological variability from the western Mediterranean region

182  E. Argiriadis; M. Vecchiato; T. Kirchgeorg; D. Battistel; N. Kehrwald; A. Callegaro; D. B. McWethy; C. Whitlock; C. Barbante
    Late Holocene human-environment interactions in New Zealand: a biomarker approach

181  M. Freund; B. Henley; D. Karoly
    ENSO flavours- Spatial dynamics of ENSO during the pre-industrial period

180  F. S. R. Pausata; Q. Zhang; F. Muschitiello; Z. Lu; L. Chafik; E. M. Niedermeyer; J. C. Stager; K. M. Cobb; Z. Liu
    Greening of the Sahara suppressed ENSO activity during the Mid-Holocene

179  F. S. R. Pausata; K. A. Emanuel; M. Chiacchio; G. T. Diro; Q. Zhang; L. Sushama; J. Stager; J. P. Donnelly
    Tropical storm activity enhanced by Saharan greening and reduced dust emissions during the African Humid Period

178  A. S. Pillai; A. Anoop; J. Ratnam; V. Prasad; F. Sanjal; S. Varghese; M. Sankaran
    Mid-late Holocene vegetation responses to climatic and disturbance drivers in Western Indian grasslands

ACC

1  E. Sessford; A. Tisserand; E. Jansen
    Water masses and circulation in the Denmark Strait during abrupt transitions for Dansgaard-Oeschger events 8-5

2  M. de Carvalho Campos; C. Mazur Chiessi; I. Voigt; A. R. Piola; H. Kuhnert; S. Mulitza
    d13C decreases in the upper western South Atlantic during Heinrich Stadials 3 and 2

3  E. Gowan; G. Knorr; L. Niu; G. Lohmann
    Role of sediments in controlling the dynamics of paleo-ice sheets

4  F. Ceperley; S. Marcott; S. Meyers
    A Late Pleistocene Meltwater Routing Record from the Gulf of Mexico

5  M. P. Jensen; A. Rummelin; S. B. Nielsen; H. Sadatzki; E. Sessford; B. Risebrobakken; C. Andersson; A. Born
    A spatial-temporal reconstruction of North Atlantic sea-surface temperatures during Dansgaard-Oeschger events 5-8

6  S. Talento; M. Barreiro
    Simulated sensitivity of the tropical climate to extratropical thermal forcing

7  S. Talento; M. Barreiro
    Control of the South Atlantic Convergence Zone by extratropical thermal forcing

8  C. Guo; K. Nisancioglu; M. Bentsen; I. Bethke
    Equilibrium simulations of Marine Isotope Stage 3 interstadial climate

9  N. Vazquez Riveiros; C. Waelbroeck; D. Roche; S. Moreira; E. Boehm; P. Burckel; H. Arz; T. Dokken
    Glacial d13C decreases in the western Tropical Atlantic during Heinrich stadials of the last 45 kyr

10  N. Umling; R. Thunell
    Deglacial variability in Eastern Equatorial Pacific deep-water circulation and bottom water chemistry

11  L. Anton; S. M. Lebreiro; S. Nave; E. Bellido; P. Mata
    Deglaciation and Holocene climate change in the Tore Seamount

12  P. Ivanovic; L. Gregoire; A. Wickert; P. Valdes; A. Burke
    Collapse of the North American ice saddle 14,500 years ago caused widespread cooling and reduced ocean overturning circulation

13  R. Kearney; C. Bronk Ramsey; R. Staff; P. Albert
    Comparing records to understand past rapid climate change: An INTIMATE database update

14  R. S. Avery; A. E. S. Kemp; J. M. Bull; C. J. Cotterill; C. Xu; J. J. Fielding; R. B. Pearce; R. Scaife; P. G. Langdon; I. W. Croudace
    A new high resolution deglacial record from Windermere, UK

15  M. H. Simon; T. M. Dokken; H. Sadatzki; F. Muschitiello; I. Hajdas; E. Jansen
    Ocean ventilation changes in the Nordic Seas during MIS 5- Insights into the mechanisms of Dansgaard-Oeschger cycles

16  A. Svensson; +18 co-authors
    Bipolar synchronicity of abrupt climate change and the role of volcanism in the last glacial period (MIS4)

17  K. Izumi; P. Bartlein
    Large-scale Climate And Vegetation Changes Over the Last Deglaciation (CLAVICHORD)

18  C. Buizert; M. Sigl; M. Severi; P. Parrenin; T. J. Fudge; B. Markle; E. Steig; K. Goto-Azuma; K. Kawamura; S. Fujita; H. Motoyama; J. Pedro
    Interhemispheric climate coupling via atmospheric and oceanic teleconnections during abrupt climate change of the last ice age

19  M. Werner; P. Gierz; G. Knorr; X. Zhang; G. Lohmann
    Explicit simulation of δ18O and δD changes in atmosphere and ocean induced by a freshwater hosing

20  R. Ivanovic; L. Gregoire; A. Wickert; P. Valdes; A. Burke
    Heinrich Stadial 1 caused by acceleration of Eurasian deglaciation ~18.5 ka

21  F. Corrick; R. Drysdale; J. Hellstrom; I. Couchoud; D. Genty; D. Blamart
    A precise chronology of millennial-scale climate events from French speleothems

22  I. Matero; L. J. Gregoire; S. L. Cornford
    Role of dynamical ice loss during the demise of the early-Holocene Laurentide ice sheet.
## Saturday 13th May 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Session Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 - 13:00</td>
<td>Mozart Room</td>
<td>Quaternary climate and environmental change in the Southern Hemisphere</td>
</tr>
<tr>
<td>11:00</td>
<td>B. Chase; M. Chevalier; A. Boom; A. S. Carr</td>
<td>The dynamic relationship between temperate and tropical circulation systems across South Africa since the Last Glacial Maximum</td>
</tr>
<tr>
<td>11:15</td>
<td>K. Braun; M. Bar-Matthews; A. Matthews; A. Ayalon; R. C. Cowling; R. Zahn; C. W. Marean</td>
<td>Speleothem stable isotopes reconstruction of the effects of meridional shifts in atmospheric pressure systems on South African rainfall and vegetation</td>
</tr>
<tr>
<td>11:30</td>
<td>T. Schneider; M. Grosjean</td>
<td>High-resolution flood history in lake sediments from SW Ecuador of the past two millennia: El Nino or not?</td>
</tr>
<tr>
<td>11:45</td>
<td>J. Tyler; A. Chapman; E. Lockier; J. Tibby; C. Barr; M. Rollog; P. Gadd; G. Jacobsen</td>
<td>The nature and causes of megadroughts in south-eastern Australia: evidence from the Holocene sediments of West Basin, Victoria</td>
</tr>
<tr>
<td>12:00</td>
<td>K. Beck; M. Fletcher; P. Gadd; H. Heijnis; K. Saunders</td>
<td>Climate and fire-mediated terrestrial-aquatic ecosystem teleconnections: a case study from temperate Tasmania</td>
</tr>
<tr>
<td>12:15</td>
<td>C. Whitlock; V. Iglesias; L. Stahle; V. Markgraf; S. Haberle</td>
<td>Postglacial vegetation-fire linkages in western Patagonia and western Tasmania as a response to large-scale climate controls</td>
</tr>
<tr>
<td>12:50</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>13:00</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>13:15</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>13:30</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>13:45</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>14:00</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>14:15</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>14:30</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>14:45</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>15:00</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>15:15</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>15:30</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>15:45</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>16:00</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>16:15</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>16:30</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>16:45</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>17:00</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>17:15</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>17:30</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>17:45</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
<tr>
<td>18:00</td>
<td>C. Mayr; A. Lücke; H. Wissel; J. Massaferro; C. Laprida; M. Oehlerich; C. Ohlendorf; R. S. Martín; J. Ramón-Mercat; J. Zhu; B. Zolitschka</td>
<td>Oxygen isotope records from Patagonian lakes as recorders of past hydroclimate and southern westerlies dynamics - calibration, present achievements and future perspectives</td>
</tr>
</tbody>
</table>

---

**MOZART ROOM**

Quaternary climate and environmental change in the Southern Hemisphere

Conveners: S. Bertrand, A. M. Lorrey, M. Rojas and K. Saunders

Chairs: A. M. Lorrey, M. Rojas, S. Bertrand, K. Saunders

Session sponsored by the Laboratory International of Global Change - LINCglobal
Saturday 13th May 2017

15:00  D. Gaiero; S. Gili; S. Goldstein; F. Chemale; J. Jweda; M. Kaplan; R. Becchio; K. Edinei
Glacial/interglacial changes of Southern Hemisphere zonal circulation from the geochemistry of South American and East Antarctic dust

15:15  J. Jones; R. Fogt; C. Goergens
Seasonal spatial pressure reconstructions across Antarctica since 1905

15:30  Z. Yu; D. Beilman; J. Loisel; J. Stelling; Z. Xia
Late Holocene Climate Changes Across the Antarctic Peninsula Induced by Atmosphere-Ocean-Ice Interactions

15:45  D. Hodgson; B. Perren; S. Roberts; W. van Nieuwenhuyze; E Verleyen; W. Vyverman; C. Butz
A Record of Southern Hemisphere Westerly Winds from subantarctic Marion Island

16:00  J. Bakke; O. Paasche; J. Schaefer; A. Timmermann
Prevailing pacing of subantarctic glaciers by Southern Hemisphere Westerlies

16:15  G. Cortese; J. Prebble; H. Bostock; A. Lorrey; B. Hayward; E. Calvo; L. Northcote; G. Scott; H. Neil
Evidence for a Holocene Climatic Optimum in the Southwest Pacific: a multiproxy study

16:30  J. Roberts; S. Misra; P. Köhler; R. Tiedemann; F. Lamy
Deconvolving the deglacial release of CO2 from the deep South Pacific

16:45  P. T. Spooner; L. F. Robinson; A. Burke; T. Chen; K. Pyle; S. Bates; K. R. Hendry
Southern Ocean cold-water coral records of dissolved Ba over the last 20 ka: Implications for paleoproductivity and deglacial dynamics
Saturday 13th May 2017

LUIS GALVE ROOM
The Holocene – its climate variability and rapid transitions
Conveners: R. S. Bradley and H. Wanner; Chairs: H. Wanner, R. Bradley

11:00  L. Gregoire; R. Ivanovic; A. Maycock; P. Valdes
Holocene lowering of the Laurentide Ice Sheet weakens North Atlantic gyre circulation and affects climate

11:15  A. De Vernal; C. Hillaire-Marcel
Short and late Holocene attainment of a full Atlantic Meridional Overturning circulation

11:30  Á. Geirsdóttir; G. Miller; S. Ölafsdóttir; D. Larsen; D. Harning; F. Christopher; S. Gunnarson
Holocene climate variability and rapid transitions in the northern North Atlantic

11:45  Ø. Paasche; J. Bakke
Climate Shifts in Arctic Norway Inferred from Past Glacier Variability

12:00  K. Nicolussi; L. Markus; C. Schlüchter; G. Weber; M.M. Ziehmer
The onset of the temperature decline after the Holocene Thermal Maximum in the Alps

12:15  M. Sigl; J. McConnell; A. Burke; J. Cole-Dai; S. Davies; H. Fischer; K. Nicolussi; G. Plunkett; M. Severi; M. Toohey
Global volcanism during the Holocene: Why do we care and what do we need?

12:30  INVITED TALK Pascale Braconnot
Exploring the Holocene with numerical experiments: mean climate and climate variability in the tropics

12:45  S. Kizhur; R. Shankar; A. Warrier; M. Yadava; R. Ramesh; R. Jani; W. Zhou; L. Xuefeng
Indian summer monsoon variability during the holocene in southern india: evidence for abrupt climatic shifts from a multi-proxy lake sediment record

“Lunch time (Multiusos room/Lunch Area)”

15:00  C. Zielhofer; W.J. Fletcher; H. von Suchodoletz; B. Schneider; K. Schepanski; A. Mikdad; S. Mischke
Millennial shifts in Saharan dust supply across the decline of the African Humid Period

15:15  C. Brierley; K. Manning; M. Maslin
Could Humans have delayed the collapse of the African Humid Period?

15:30  C. Karamperidou; J. Conroy
Using multi-resolution proxies to examine ENSO impacts on the mean state of the tropical Pacific

15:45  P. Grothe; K. Cobb; G. Liguori; E. Di Lorenzo; A. Capotondi; R.L. Edwards; D. Deocampo; H. Sayani; J. Lynch-Stieglitz
Robust evidence for forced changes in ENSO: from the mid-Holocene to the 21st century

16:00  H. Mcgregor; S. Phipps; M. Fischer; M. Gagan; L. Devriendt; A. Wittenberg; C. Woodroffe; J.X. Zhao; J. Gaudry; D. Fink; A. Chivas
External and internal origins of ENSO variability revealed by Holocene corals and climate model simulations

16:15  N. Graham; D. Verschuren; M. Salzer; M. Hughes
Cause and consequences of the “4.2 kyr event”

16:30  B. Davis; A. Mauri; J. Kaplan
The lost season: winter temperature change during the Holocene
Saturday 13th May 2017

MARIANO GRACIA ROOM
Regional syntheses of human-climate-environment interactions
Conveners: F. Arnaud, M.-J. Gaillard-Lemdahl, P. Gell, T. Hoffman and V. Vanacker
Chairs: F. Arnaud, M.-J. Gaillard-Lemdahl, P. Gell, T. Hoffman and V. Vanacker

11:00  J. P Jenny; F. Pierre; G. E. Irene; B. Alexandre; L. François; N. Anders; B. Kristina; N. Alexandre; A. Bernhard; C. Nuno
Reconstructing rates of changes in global soil erosion from lake sediment archives

11:15  M. J. Gaillard; K. Morrison; M. Madella; N. Whitehouse; LandCover6k core group and co-coordinators
Holocene global land-cover and land-use change for climate modelling studies: Achievements of the PAGES LandCover6k initiative (2015-2016)

11:30  P. Sommer; J. O. Kaplan
Quantitative Modeling of Human-Environment Interactions in Preindustrial Time

11:45  A. Kay; J. Kaplan
Mapping livelihoods in West and Central Africa: changes in food-production from 1800 BC to AD 1500

12:00  A. Krishnamurthy; P. Srinivasan; T. Rathnasiri Premathilake; N. Reghu Ajeeshkumar
Diverse approaches to reconstructing quantitative land cover and climate changes in peninsular India

12:15  K. Zhang
Abrupt ecological transition in China’s aquatic systems during the last two centuries

12:30  D. Penny; N. Fischer; M. Prokopenko
15th century C.E. urban collapse as a consequence of emergent vulnerability to climate variability

12:45  J. Iriarte; R. Smith; J. Gregorio de Souza; F. Mayle; B. Whitney; M. L. Cardenas; J. Singarayer; J. F. Carson; S. Roy; P. Valdes
Out of Amazonia: Late-Holocene climate change and the Tupi-Guarani trans-continental expansion

"Lunch time (Multiusos room/Lunch Area)"

15:00  A. Feurdean; B. Vanniére; W. Finsinger; M. Adámek; P. Bobek; M. Bobrovsky; B. Davis; A. Diaconu, E. Dietze, B. Deak, G. Florescu, E. Jamrichová; K. Kajukalo, J. Kaplan, D. Kupriyanov, C. Lemmen, E. Marinova, K. Marcisz, E. Novenko, D. Rius, M. S. Slowinski, S. Veski, S. Tonkov, O. Valkó, I. Vincze
Natural and human-driven fire regime and land-cover changes in Central and Eastern Europe

15:15  M. Chaput; K. Gajewski
A combined archaeological and palaeoenvironmental perspective of Holocene human-environment interactions in North America

15:30  R. Marchant; 25 co-authors
Disentangling drivers and directions of land cover change: human and environmental interactions across East Africa from 6000 years ago to present

15:45  F. Li; M. J. Gaillard; F. Mazier; S. Sugita; Q. Xu; Z. Zhou; X. Cao; U. Herzschuh; Y. Zhao; D. Laffly
Pollen-based land-cover change during the Holocene in temperate China for climate modelling

16:00  L. Stahle; C. Whitlock; S. Habelle
Climate and human influences on the Holocene fire and vegetation history of western Tasmania, Australia

16:15  M. J. Bunting; M. Farrell; P. Marshall; A. Bayliss; A. Whittle; R. Batchelor; D. Druce; M. Grant; T. Hill; N. Hollindrake
From mud to map: reconstructing Neolithic land cover dynamics at a regional scale from pollen records

16:30  C. Giguet-covex; M. Bajard; W. Chen; F. David; F. Gentile Ficetola; L. Gielly; J. Poulenard; P. Sabatier; P. Taberlet; K. Walsh; F. Arnaud
New lights on human-environment interactions in the Northern French Alps provided by lake sediment DNA

16:45  J. Woodbridge; N. Roberts; R. Fyfe; A. Palmisano; A. Bevan; S. Shennan
Pollen-inferred Mediterranean landscape change and human population dynamics since the advent of Neolithic farming
Saturday 13th May 2017

HOTEL ROMAREDA-ROOM1
Historical climate reconstruction and impacts of the Common Era
Conveners: R. Brázdil, S. White and D. Degroot; Chairs: S. White

11:00 Z. Hao; J. Zheng; D. Sun
Dry/wet change characteristics of the past 1000 years over eastern China

11:15 C. Gao; Y. Gao
European Hydroclimate Response to Volcanic Eruptions over the Past Nine Centuries

11:30 P. Dobrovolny; R. Brázdil; L. Dolák; L. Reznicková; O. Kotyza; H. Valásek
Signs of the Little Ice Age in Central Europe from AD 1500 compiled from various proxies

11:45 P. Guzowski; A. Izdebzki; M. Kozlowska
Economic response to climate change. Poland during Little Ice Age

11:15 H. Barrett; J. Jones; G. Bigg
Historical reconstructions of El Niño Southern Oscillation using data from ships logbooks

12:00 D. Nash; K. Pribyl; G. Endfield; J. Klein; G. Adamson
Documentary-based reconstruction of rainfall variability over Malawi during the late nineteenth century

12:15 D. Veres; J. Longman; C. Chauvel; Z. Atlas; A. Haliuc; V. Ersek
Millennial-scale geochemical records of anthropogenic impact and natural climate change in the Romanian Carpathians during the Holocene

12:15 C. Latorre; R. De Pol-Holz; C. Pozo; J. Rech; E. Gayò; C. Santoro
Linking abrupt changes in local marine radiocarbon reservoir age (ΔR) to upwelling and hunter-gatherer demographic change in coastal northern Chile during the mid-Holocene

12:30 L. Rodrigues; U. Lombardo; M. Trauerstein; F. Preusser; H. Veit
Pre-Columbian raised fields in the Llanos de Moxos. Bolivian Amazon: An adaptation to the local environment

12:45 A. Koch; S. Lewis; M. Maslin; C. Brierley
The impact of the discovery of the Americas on the Earth System

13:00 N. Whitehouse
Human resilience and adaptation of early agricultural societies

13:15 L. Julian; C. Lemmen; A. Hafner
Reconstructing Late Neolithic and Bronze Age Hinterland and Lake Shore Socio-Environmental Interactions in the Three Lake Region of Western Switzerland

13:30 K. Mills; J. Anderson; D. Ryves; I. Ssemmanda; A. Zawadzki
Identifying the onset and impact of the anthropocene on tropical lake systems

13:45 L. Phelps; J. Kaplan
Modeling land use for animal production in global change studies
### Saturday 13th May 2017

#### HOTEL ROMAREDA-ROOM2

**Before and after – climate contrasts across the MPT**

*Conveners: E. Wolff, E. McClymont, M. Crucifix and H. Fischer*

*Chairs: E. Wolff, E. McClymont*

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title of Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td><strong>P. Tzedakis; M. Crucifix; T. Mitsui; E. W. Wolff</strong></td>
<td>A simple rule to determine which insolation cycles lead to interglacials</td>
</tr>
<tr>
<td>11:15</td>
<td><strong>T. Chalk; G. Foster; M. Hain; E. Rohling; M. Badger; R. Pancost; P. Wilson</strong></td>
<td>Pleistocene CO2 change and the MPT, from boron isotopes</td>
</tr>
<tr>
<td>11:50</td>
<td><strong>M. Hain</strong></td>
<td>Simulating Mid-Pleistocene CO2 change</td>
</tr>
<tr>
<td>11:45</td>
<td><strong>Y. Sun; Q. Yin; M. Crucifix; S. Clemens; P. Araya-Melo; W. Liu; X. Qiang; A. Berger; Z. An</strong></td>
<td>Mid-Pleistocene monsoon transition from 25- to 100-kyr cycles</td>
</tr>
<tr>
<td>12:00</td>
<td><strong>H. Ford; M. Raymo</strong></td>
<td>Detangling regional and global signals in seawater δ18O records across the mid-Pleistocene Transition</td>
</tr>
<tr>
<td>12:15</td>
<td><strong>D. Hodel; P. Tzedakis; L. Skinner; M. Vautravers; J. Rolfe; J. Nicolson</strong></td>
<td>A continuous 1.5-million year record of millennial climate variability from the Iberian Margin</td>
</tr>
<tr>
<td>12:30</td>
<td><strong>L.D. Pena González; S.L. Goldstein; M. Jaume-Seguí; J. Kim; M. Yehudai; J. Farmer; H. Ford; L. Haynes; B. Hönsich; M.E. Raymo; P. Ferretti; T. Bickert</strong></td>
<td>Atlantic Meridional Overturning Circulation dynamics across the Mid-Pleistocene Transition</td>
</tr>
<tr>
<td>12:45</td>
<td><strong>M. Peral; M. Daëron; D. Blamart; F. Bassinot; M. Marino; N. Ciaranfi; A. Girone; P. Maiorano</strong></td>
<td>A new dataset of temperatures for the mid-Pleistocene transition via clumped isotope measurements in foraminifera at Montalbano Jonico (south of Italy) and the implication of local effect</td>
</tr>
</tbody>
</table>

#### HOTEL ROMAREDA-ROOM2

**Pliocene climate variability over glacial-interglacial timescales (PLIOVAR)**

*Conveners: E. McClymont, A. Dolan, A. Haywood and U. Salzmann*

*Chairs: E. McClymont, A. Dolan*

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title of Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00</td>
<td><strong>A. Haywood; H. Dowsett; A. Dolan; B. Otto-Bliesner; M. Chandler; D. Lunt; D. Rowley; A. Abe-Ouchi; U. Salzmann; PlioMIP Participants</strong></td>
<td>Achievements and Future Direction of the Pliocene Model Intercomparison Project</td>
</tr>
<tr>
<td>15:15</td>
<td><strong>D. Chandan; R. Peltier</strong></td>
<td>Mid-Pliocene winter temperature pattern not unlike that of recent decades: causes and implications for the 21st century</td>
</tr>
<tr>
<td>15:30</td>
<td><strong>B. Risebrobakken; S. Panitz; P. Bachem; U. Salzmann; S. De Schepper; E. McClymont</strong></td>
<td>Land-ocean interactions at high latitudes during the Pliocene</td>
</tr>
<tr>
<td>15:45</td>
<td><strong>F. Dearing Crampton-flood; F. Peterse; D. Munsterman; T. Donders; J. Sinninghe-Damste</strong></td>
<td>A terrestrial Pliocene-Pleistocene temperature record from North-Western Europe</td>
</tr>
<tr>
<td>16:00</td>
<td><strong>M. Alonso- García; E. Salqueiro; T. Rodrígues; C. A. Álvarez-Zarikian; W. Soares; A. I. Lopes; H. Kuhnert; U. Röhl; A. H.L. Voelker; F. J. Sierro; J. A. Flores; F. Abrantes</strong></td>
<td>Late Pliocene-Early Pleistocene oscillations in Mediterranean Overflow water and climate in the Iberian Margin</td>
</tr>
<tr>
<td>16:15</td>
<td><strong>M. Willeit; A. Ganopolski</strong></td>
<td>Transient modelling of Pliocene climate variability over glacial-interglacial timescales</td>
</tr>
<tr>
<td>16:30</td>
<td><strong>F. Schwarz; U. Salzmann; X. Fang; P. Wu; J. Pross; E. Appel; J. Nie; C. N. Garzione; F. Cheng; R. V. Heermann</strong></td>
<td>The mid-Pliocene warm period in the Asian interior: Assessing palaeoclimate variability with high-resolution pollen records from the Qaidam Basin and Kunlun Pass</td>
</tr>
<tr>
<td>16:45</td>
<td><strong>J. Nie; S. Ji; D. O. Breecker</strong></td>
<td>Intensified aridity in northern China during the Pliocene warm periods</td>
</tr>
</tbody>
</table>
Saturday 13th May 2017

**ROOM 11 AUDITORIUM (BASEMENT)**

Data Stewardship for paleosciences

*Conveners: J. Emile-Geay and M. Kucera*

11:00  D. Emile; K. DeLong; H. Kilbourne; B. Williams

'Save our Marine Annually-resolved Proxy Archives'

11:15  N. McKay; J. Emile-Geay

Linked PaleoData: What is it and what can it do for you?

11:30  M.F. Sanchez Goñi; S. Desprat; A.L. Daniau; F. Bassinot; J.M. Polanco-Martinez; S.P. Harrison

The ACER pollen and charcoal database: a global resource to document vegetation and fire response to abrupt climate changes during the last glacial period

11:45  GENERAL DISCUSSION

**POSTER SESSION 09:00 – 10:30**

**HIPOSTILA ROOM**

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>Development of a regional glycerol dialkyl glycerol tetraether (GDGT) temperature calibration for Antarctic and sub-Antarctic lakes</td>
<td>S. Roberts; L. Foster; E. Pearson; S. Juggins; D. Hodgson; K. Saunders; E. Verleyen</td>
</tr>
<tr>
<td>139</td>
<td>Late Quaternary sedimentary environmental change in the Bonaparte Gulf, northwestern Australia</td>
<td>T. Ishiwat</td>
</tr>
<tr>
<td>138</td>
<td>Timing of the last deglaciation in the South Eastern Pacific: sea-surface temperature and glacier dynamic reconstructions</td>
<td>H. Eri Amsler; M. Ikehara; I. N. McCave; S. L. Jaccard</td>
</tr>
<tr>
<td>137</td>
<td>Variations of the Antarctic Circumpolar Current and environmental conditions in the Kerguelen Islands region, Southern Ocean, during the last 20 kyr</td>
<td>C. Xavier; A. Leanne; B. Bout-Roumazeilles; V. Cortese; G. Eynaud; F. Garcia-Martinez; A. Jaccard; S. Mazaud; E. Michel</td>
</tr>
<tr>
<td>136</td>
<td>Deglacial ventilation history of the deep South Indian Ocean: new insights from radiocarbon analyses of ultra-small foraminifer samples with an accelerator mass spectrometer (AMS) Mini-Carbon D Muhammad (MCDM) System (MICADAS)</td>
<td>J. Gottschalk; S. Szidat; E. Michel; A. Mazaud; A. Studer; L. Thol; A. Martinez-Garcia; S. L. Jaccard</td>
</tr>
<tr>
<td>135</td>
<td>Timing of the last deglaciation in the South Eastern Pacific: sea-surface temperature and glacier dynamic reconstructions</td>
<td>G. Siani; E. Michel; N. Haddam; F. Lamy; R. De Pol-Holz; S. Duchamp-Alphonse</td>
</tr>
<tr>
<td>134</td>
<td>Variations in near-bottom flow of ACC during past glacial cycle in SW Indian Ocean</td>
<td>H. Eri Amsler; M. Ikehara; I. N. McCave; S. L. Jaccard</td>
</tr>
<tr>
<td>133</td>
<td>Reassessing Climate and pre-Columbian Drivers of Paleofire Activity in the Bolivian Amazon</td>
<td>A. Nair; R. Mohan</td>
</tr>
<tr>
<td>132</td>
<td>Coherent millennial-scale hydroclimate variability in southern Australasia during the Last Glacial Period</td>
<td>S. Patil; R. Mohan; S. Shetye; S. Gazi; K-H. Baumann; S. Jafar</td>
</tr>
<tr>
<td>131</td>
<td>Biogeochemical distribution of distinct Coccolithophores in the Indian Sector of the Southern Ocean</td>
<td>M. Mariani; M. S. Fletcher; S. E. Connor; D. Bowman; H. Cadd; S. Haberle; F. Hop; G. Jacobsen; K. Saunders; A. Zawadzki</td>
</tr>
<tr>
<td>130</td>
<td>Late Quaternary paleoenvironmental reconstruction using sedimentological parameters and quartz grains from lacustrine sediments of Schirmacher Oasis, East Antarctica</td>
<td>A. Kumar Warrier; H. Pednekar; M. Badanal; R. Mohan; S. Gazi</td>
</tr>
<tr>
<td>129</td>
<td>Linked PaleoData: What is it and what can it do for you?</td>
<td>G. Falster; J. Tyler; John Tibby; P. Kershaw; C. Barr; K. Grant; C. Turney</td>
</tr>
<tr>
<td>128</td>
<td>Late Quaternary sedimentary environmental change in the Bonaparte Gulf, northwestern Australia</td>
<td>S. Roberts; L. Foster; E. Pearson; S. Juggins; D. Hodgson; K. Saunders; E. Verleyen</td>
</tr>
<tr>
<td>127</td>
<td>Floods Working Group meeting: Working Group meeting:</td>
<td>Climate History Network AUDITORIO: ROOM 8 09:00 - 10:30 H.</td>
</tr>
<tr>
<td>126</td>
<td>Evidences for submerged ancient river courses in Sri Lanka</td>
<td>L. M. Thol; S. L. Jaccard; A. Martinez-Garcia; J. Lippold; A. Mazaud; E. Michel</td>
</tr>
<tr>
<td>125</td>
<td>Reconstructing dust input and its influence on the efficiency of the biological pump in the Southern Indian Ocean over glacial-interglacial changes</td>
<td>J. Gottschalk; S. Szidat; E. Michel; A. Mazaud; A. Studer; L. M. Thol; A. Martinez-Garcia; S. L. Jaccard</td>
</tr>
<tr>
<td>124</td>
<td>Deglacial ventilation history of the deep South Indian Ocean: new insights from radiocarbon analyses of ultra-small foraminifer samples with an accelerator mass spectrometer (AMS) Mini-Carbon D Muhammad (MCDM) System (MICADAS)</td>
<td>G. Siani; E. Michel; N. Haddam; F. Lamy; R. De Pol-Holz; S. Duchamp-Alphonse</td>
</tr>
<tr>
<td>123</td>
<td>Timing of the last deglaciation in the South Eastern Pacific: sea-surface temperature and glacier dynamic reconstructions</td>
<td>H. Eri Amsler; M. Ikehara; I. N. McCave; S. L. Jaccard</td>
</tr>
<tr>
<td>122</td>
<td>Variations in near-bottom flow of ACC during past glacial cycle in SW Indian Ocean</td>
<td>C. Xavier; A. Leanne; B. Bout-Roumazeilles; V. Cortese; G. Eynaud; F. Garcia-Martinez; A. Jaccard; S. Mazaud; E. Michel; A. Studer; L. Thol; L. Wilks J.</td>
</tr>
<tr>
<td>121</td>
<td>Variations of the Antarctic Circumpolar Current and environmental conditions in the Kerguelen Islands region, Southern Ocean, during the last 20 kyr</td>
<td>S. Roberts; L. Foster; E. Pearson; S. Juggins; D. Hodgson; K. Saunders; E. Verleyen</td>
</tr>
<tr>
<td>120</td>
<td>Development of a regional glycerol dialkyl glycerol tetraether (GDGT) temperature calibration for Antarctic and sub-Antarctic lakes</td>
<td>T. Ishiwat</td>
</tr>
</tbody>
</table>
Saturday 13th May 2017

138 M. Mendelova; A. Hein; N. Hulton
Reconstruction of San Lorenzo Ice Cap, central Patagonia (47.9°S), using geomorphological mapping and cosmogenic surface exposure analysis

139 J. Tibby; C. Barr; L. Arnold; P. Gadd; A. Henderson; M. Leng; P. McInerney; K. Nielsen; J. Marshall; G. McGregor
An environmental record through Marine Isotope Stage 3 from North Stradbroke Island, sub-tropical Australia

140 H. Gadd; J. Tibby; J. Tyler; C. Barr; A. Lee; G. Patria
A multi-proxy assessment of 100,000 years of environmental change in sub-tropical Australia.

141 J. L. Moreno Calderon; S. L. Fontana; L. D. Rojo; T. Giesecke
Post-glacial vegetation dynamics and climate in north-western Patagonia, Argentina

142 E. Thomas; C. Allen; H. Blagbrough; T. Bracegirdle; M. Holloway; L. Sime
Reconstructing winds in the Amundsen-Bellingshausen Sea over the past 300 years

143 B. Lecavalier; L. Tarasov
Antarctic ice sheet evolution over the last glacial cycle: Exploring the parameter phase-space of the Glacial Systems Model

145 E. Calvo; L. Quiros-Collazo; H. Bostock; S. Schouten; H. Nell; C. Pelejero
Ocean productivity across the Subtropical Front over the last deglaciation

147 B. L. Valero Garcés; M. Frugone; F. Barreiro-Lostres; R. Prego; P. Bernárdez; M. L. Carrevedo; C. Latorre; A. Moreno; J. Sirico
Stroup; R. Ilamilton Williams; C. Y. Chen; D. McGee
Hydrological variability in Atacama altiplano lakes during the last millennia

149 K. M. Saunders; B. Perren; L. Sime; C. Butz; S. Roberts; M. Grosjean; D. A. Hodgson
Late Glacial to present Southern Hemisphere westerly wind variability over the Southern Ocean and relationships with sea ice, temperature and carbon dioxide

150 D. Rodbell; M. Abbott; D. McGee; C. Chen; J. Stoner; R. Hatfield; P. Tapia; M. Bush; B. Valero Garcés; N. Weidhaas; A. Woods; B. Valencia
Initial results from Deep Drilling of Lake Junín, Perú

151 C. Y. Chen; D. McGee; J. Stoner; R. Hatfield; A. Woods; J. Tal; B. Valero-Garcés; P. Miguel Tapia; M. Bush; M. Abbott; D. Rodbell
A U/Th age model for the continuous, >600-kyr-long lacustrine sediment record of Lake Junin, Peru

152 M. Puentes; A. Seim; D. Christie; J. C. Aravena; A. Gutiérrez; H. W. Linderholm
On the large scale controls of tree growth from the southernmost forest in the world

153 K. Manay; B. Turcq; V. Echevin; D. Gutiérrez; O. Marti; P. Bracconot
Mid-Holocene data-model comparison of paleoceanography and paleoclimate in Peru based on CMIP5 simulations

155 A. M. Abarriz; M. S. Tonello; L. Jarpa; A. Martel-Cea
Modern pollen, diatom, and chironomid assemblages as quantitative indicators for the reconstruction of past environmental conditions in the south-central Chile

159 J. Crumpton-Banks; J. Rae; R. Greenop; A. Burke; A. Mackensen
CO2 drawdown via Southern Ocean stratification at the onset of the last glacial period

161 V. Flores-Aguirreque; C. Aguirre; M. Rojas; P. Arias; N. Buening; L. Stott
Analyzing the origin of the southerly wind variability along the eastern edge of the South Pacific Subtropical Anticline

162 S. Phipps; M. Rojas; D. Ackerley; J. Pedro; C. González
The evolution of the Southern Hemisphere climate within transient simulations of the Holocene

163 S. Phipps
Assimilation of Southern Hemisphere proxy records into a climate modelling framework

164 T. Kasper; T. Haberzettl; M. Wündsch; F. Frenzel; M. Zabel; K. Kirsten; A. Carr; G. St-Onge; G. Daut; M. Meadows; L. Quick; R. Mäusbacher
Paleoenvironmental changes during the Holocene in the Winter-Rainfall-Zone of South Africa. A continuous, high-resolution, multi-proxy record from coastal lake Verlorenvlei

165 G. Bertrand; G. Fiers; N. Van Daele; E. Granon; M. De Batist
Sources of organic matter to Lago Castor (Chile, 45°S) during the late Quaternary: Implications for the evolution of vegetation and the southern westerlies

166 R. Wilson; K. Allen; P. Baker; B. Buckley; E. Cook; R. D’Arrigo; M. Grandjean; J. Palmer
Exploring the potential of Blue Intensity using conifer trees from Tasmania and New Zealand

167 N. Van der Putten; F. Adolphy; A. Mellström; J. Sjölte; C. Verbruggen; R. Muscheler
Holocene Southern Hemisphere W esterly belt variability: investigating the linkage to solar forcing based on a terrestrial record from the Crozet archipelago, Indian Ocean

169 L. Guerra; E. L. Fiorano
The limnogeological record of Melincué Lake (central Argentina) through the last millennium in the South American hydro-climate context

171 J. Bakke; E. Storen; F. Arnaud; J. Poulenard; E. Malet; P. Sabatier
Late Holocene glacier activity on the Kerguelen Island, South Indian Ocean - reconstructed from distal glacier-fed lake sediments

172 A. Mazaud; E. Michel; X. Crosta; M. Paterne; G. Isguder; V. Bout-Roumazeilles; F. Beny; S. Jaccard
Antarctic Circumpolar Current (ACC) and ocean evolution in the Kerguelen sector during the deglaciation and the last climatic cycles

173 S. T. Kock; K. Schittek; A. Lücke; L. Lupo; H. Wissel; H. Vos; F. Schäbitz
Stable isotope records (δ13C, δ18O) as paleoclimate proxies in vascular plant dominated high-Andean cushion peatlands: The Cerro Tuzgle Peatland (24° S, NW Argentina)

175 D. Groff; J. Gill
Paleoecological reconstruction of a marine-terrestrial linkage in the Falkland Islands

176 E. Michel; N. Haddam; G. Siani; F. Dewilde
Southern Ocean deep water changes during the last deglaciation: Antarctic divergence upwelling and AAIW formation in the South-East Pacific sector

178 A. Araneda Castillo; P. Jana-Pinninghoff; C. Vergara; D. Álvarez; P. Torrejon; N. Fagel; M. Aguayo; R. Urrutia
A Late-Pleistocene chironomid record from Northern Patagonia: does it reflect similar trends than classical proxies?
**Saturday 13th May 2017**

186  | P. Moreno; J. Videla  
**Vegetation, climate and fire-regime shifts in northwestern Patagonia since 24,000 yr bp**

185  | M. C. Guarinello de Oliveira Portes; H. Behling  
**The last 600 cal yr BP ecosystems dynamics at Serra da Bocaina National Park, Southeastern Brazil**

184  | D. Álvarez; J. Cárdenas; P. Pedreros; P. Jana; F. Torrejon; A. Araneda; R. Urrutia  
**Holocene hydrological variability in Northern Chile using δ18O signal on freshwater ostracods and mollusks**

183  | K. Schittek; S. Kock; Lücke A.; Ohlendorf C.; Hense J.; Kulemeyer J.; Lupo L.; Schätzelt P.  
**High-altitude peatland records of environmental changes in the central Andes over the last 3000 years**

182  | M. E. de Porras; A. Maldonado; M. Carré; A. Boom  
**Disentangling the late pleistocene tropical-extratropical rainfall systems interaction in the southern Atacama desert**

181  | A. Maldonado; M. E. de Porras  
**Tracing the northern edge of Southern Westerlies dynamics as an indicator of precipitation seasonality in Subtropical Chile since the Late Pleistocene**

180  | L. Oppedal; J. Bakke; O. Paasche; J. Werner  
**Cirque glacier rejuvenation and retreat on South Georgia since ~10 ka BP**

179  | S. T. Kock; K. Schittek; A. Lücke; A. Maldonado; B. Mächtle  
**Modern environmental implications and Late Holocene development derived from a vascular plant dominated high-elevation cushion peatland in the Chilean Andes (27° S)**

178  | I. Vilanova; A. Tripaldi; E. L. Piovano; S. L. Forman; J. Chiesa; E. Jobbagy; L. D. Rojo; G. Heider; K. Schittek  
**Vegetation and environmental changes related to hydroclimate regimes in Western Pampas, Argentina, over the last 1.5 kyr.**

177  | M. L. Carrevedo Goytia; C. Latorre; V. McMrostie; M. Pfeiffer; E. M. Gayó; C. M. Santoro; R. Amundson  
**Unprecedented diatom records show late Quaternary paleolake environments along the hyperarid Atacama Desert, northern Chile**

176  | P. Fernández; C. Lodis; F. Lambert; M. Schwikowski; T. Jenk  
**Preliminary results on the glacio-chemical investigation of firn cores from the central Chilean Andes**

---

**MPT**

55  | A. Ganopolski; M. Willelt; R. Calov; V. Brovkin  
**Simulation of glacial cycles before, across and after MPT**

54  | E. Wolff; J. Chappellaz; H. Fischer; T. van Ommen  
**Synthetic ice core records of the past 1.5 million years**

53  | S. Felder; A. C. G. Henderson; M. J. Leng; T. Wagner  
**The mid-Pleistocene transition in a marginal sea: A high resolution, multi-proxy study in the southern Sea of Japan (IODP Exp. 346, Site U1427)**

52  | S. Worne; S. Render; G. Swann; Z. Stroynowski; M. Leng; C. Ravelo  
**Investigating sea ice, productivity and nutrient utilisation in the Bering Sea over the Mid-Pleistocene Transition (0–1.2 Ma)**

51  | P. Balco; R. Drysdale; J. Woodhead; J. Hellstrom; G. Zanchetta; T. Rodrigues; A. Voelcker; E. Wolff; P. Ferretti; C. Spolt; A. Fallick  
**Radiometric dating of glacial terminations through the MPT**

50  | A. H. L. Voelcker; T. Rodrigues; M. Padilha; F. J. Jimenez-Espejo; A. Bahr; E. Salgueiro; A. Rebott; C. Cavaleiro; U. Roehl; H. Ruhnert  
**Impressions of the Mid-Pleistocene Transition in Surface and Mediterranean Outflow Water Records from the Gulf of Cadiz, Portugal**

49  | J. Müller; O. Romero; E. Cowan; E. McClymont; M. Forwick; H. Asahi; C. März; I. Suto; A. Mix; J. Stoner  
**Mid Pleistocene productivity events in the Gulf of Alaska (NE Pacific)**

48  | L. Haynes  
**Deep Equatorial Atlantic Carbon Storage Across the Mid-Pleistocene Transition**

47  | H. Detlef; S. Belt; S. Sosdian; L. Smik; C. Lear; L. Hall; P. Cabedo-Sanz; K. Husum; S. Rember  
**Sea ice dynamics across the Mid-Pleistocene: Insights from the Bering Sea**

46  | J. Holtvoeth; E. Lyons; K. Panagiotopoulos; R. D. Pancost  
**Biomarkers reflecting terrestrial ecosystem response to pre-MPT climate change in the Eastern Mediterranean (Ohrid Basin; Albania, Macedonia)**

45  | P. Kershaw; K. Sniderman; B. Wagstaff; P. O'Sullivan  
**Terrestrial palaeoecological evidence of the Mid-Pleistocene Transition in southeastern Australia**

44  | A. Schmitt; M. Elliot; C. La; A. Movellan; A. Foan; S. Jorry; J. Borgomano  
**The variation of the carbonate production during the MPT: Test of the past seasonality and inter-annual variability of water column temperatures using the new insights into Mg/Ca ratios of single foraminifera shells of planktonic species G. ruber by LA-ICPMS**

43  | T. Rodrigues; B. Martrat; M. Casado; J. O. Grimrat; M. Alonso Garcia; M. Rufino; D. Hodell  
**Tracking major climate changes in the southwestern Iberian Margin during Mid Pleistocene Transition**

42  | J. Kim; M. Leng  
**Climate reorganisation during the Mid-Pleistocene Transition: the role of moisture delivery to high latitude sites such as the Bering Sea**

41  | A. Cortina; J. O. Grimrat; M. Casado; B. Martrat; F. Sierro; J. A. Flores; I. Cacho; M. Canals  
**Bipolar climate seesawing along the last 800,000 years**

40  | M. Yehudai; J. Kim; M. Jaume-Seguí; S. L. Goldstein; L. D Pena; L. Haynes; B. Hönsch; J. Farmer; H. Ford; M. Raymo; T. Bickert  
**The Equatorial Atlantic Ocean Thermohaline Circulation Across the Mid-Pleistocene Transition**

39  | A. P. Hasenfritz; S. L. Jaccaord; A. Martinez-Garcia; D. A. Hodell; D. Vance; S. M. Bernasoni; H. (Kikki) Fleiwen; G. H. Haug  
**Evolution of Antarctic Ocean stratification through the glacial of the MPT**

38  | J. Kim; M. Yehudai; M. Jaume-Seguí; S. L. Goldstein; L. D. Pena; L. Haynes; H. Ford; B. Hönsch; M. Raymo  
**Reconstruction of the North Atlantic end-member of the AMOC across the Mid-Pleistocene Transition**

---

**HIST**

57  | L. Semenova  
**Assessment of variability and distribution of drought over the Kievan Rus’ territories during the 11-17 centuries**
R. Przybyłak; P. Wyszyński
Air temperature in Novaya Zemlya Archipelago and Vaygach Island from 1832 to 1920 in the light of early instrumental data

D. Klauš; P. Wyszyński; K. Dethloff; R. Przybyłak; A. Rinké
Evaluation of 20CR reanalysis data based on model results and observations from Franz Josef Land during the ETCW

G. Demarec; R. Verheyden
Walthère Victor Spring, a forerunner in the study of the greenhouse effect, at the University of Liège, Belgium

E. Tejedor; M. A. Say; M. De Luis; M. Barriéndos; R. Serrano-Notivoli; K. Novak; L. A. Longares; E. Martínez-Del Castillo; J. M. Cuadrat
Advances in the understanding of the climate evolution of the Iberian Peninsula since AD 1700 inferred from tree-ring records and documentary evidence

N. Rudaya; S. Krivonogov; S. Zhilich; D. Otgonbayar; L. Nazarova
Late Holocene landscape development in Southwestern Siberia and Northwestern Mongolia: climate, vegetation and humans.

G. Plunkett; G. Swindles
Do sub-annual climate impacts on human populations leave a detectable legacy in palaeoenvironmental archives? A tephra-dated interrogeration of settlement in a marginal environment

L. Sadorní; A. Masi; C. Giraudí; M. Magny; E. Ortu; G. Zanchetta; A. Izdebski
Environmental, historical and archaeological evidence draw the history of Sicily during the last 2000 years

A. García-Alix; J. L. Toney; G. Jiménez-Moreno; C. Pérez-Martínez; L. Jiménez; M. Rodrigo Gámiz; R. S. Anderson; D. Peña-Angulo; J. C. Gonzalez-Hidalgo
Global warming evidence from a long chain diol record of an alpine lake in southern Iberia

C. Camenisch
Wildfires and desiccated fountains: Heat and drought in 1473

J. Zheng; M. Wu; Q. Ge; Z. Hao; X. Zhang
Decadal Variability of Summer Precipitation over Eastern China in Observation, Historical Reconstruction and CESM Simulation

P. Jana-Pinninghoff; F. Torrejon; A. Araneda; A. Stehr Gesche
Reconstruction of precipitation regime since 1600 AD in Santiago de Chile (33° S) using documentary records as proxy.

R. T. Patterson; G. T. Swindles
The contribution of "Citizen Scientists" to determining the influence of ocean-atmospheric oscillations on lake ice phenology in eastern North America

PLIO

M. Stockhecke; J. Kingston; C. Beck; E. Brown; A. Cohen; A. Deino; and the HSPDP Drilling Project research team
Late Pliocene East African climate variability reconstructed from the Baringo Basin (Kenya) HSPDP drill core

E. Grimey; L. Dupont
Pliocene vegetation and hydrology changes in western equatorial South America

Y. Sun; G. Ramstein; T. Zhou
East Asian summer monsoon dynamics in past and future warmer climates: mid-Pliocene versus RCP4.5 scenario

C. van der Weijst; J. Winkelhorst; F. Sangiorgi; F. Peterse; G.-J. Reichart; A. van der Meer; R. Stein
Fossil samples of the Labrador Sea during the intensification of the North Hemisphere glaciation

E. H. L. Voelker; H. Evans; J. Channell; D. A. Naafs; R. Stein
Yukon Atlantic surface and deep-water records reveal millennial-scale variations during the Pliocene Warm Period

U. Salzmann; S. Panitz; S. De Schepper; B. Rissebrobakken; A. Dolan; A. Haywood
Pliocene vegetation and climate evolution in Arctic Norway controlled by Northern Atlantic Current variability

Y. Smith; D. Hill; A. Dolan; A. Haywood; H. Dowsett
Icebergs in the Nordic Sea during the Pliocene

C. Caroline; S. De Schepper; K. Fahl; R. Stein
Seasonal sea ice in the Iceland Sea during the Late Pliocene

J. Pérez-Asensio; M. P. Mata; E. Samankassou; G. Jiménez-Moreno; J. C. Larrañaga; F. J. Sierra; Á. Salazar; J. M. Salvan; J. Civis
Glacial-interglacial and insolation-controlled and environmental variability on early Pliocene deposits from the lower Guadalquivir Basin (SW Spain)

E. Mcclmont; M. L. Sanchez-Montes; T. Caley; L. Rossignol; Expedition 361 Scientists
Aguilas leakage to the Atlantic Ocean during the Pliocene

E. Mcclmont; A. Elmore; B. Petrick; M. Geavies; H. Elderfield
Late Pliocene variability in Antarctic Intermediate Water properties recorded in the Southeast Atlantic

A. Dolan; A. Haywood; C. Prescott; J. Pope; D. Hill; F. Howell; J. Yoss
Sources of Uncertainty in Modelling mid-Pliocene Arctic Amplification

C. Zorzi; A. de Vernal; A. Rochon
Paleoceanographical conditions of North Pacific Ocean during the Pliocene based on organic-walled

R. Feng; B. Otto-Bliesner; T. Fletcher; A. Ballantyne; E. Brady; C. Tabor
Late Pliocene climate sensitivity estimated with the Community Earth System Model version 2

G. Swan; C. Kendrick; A. Dickson
Late Pliocene diatom carbon isotope reconstructions of pCO2 in the Subarctic Pacific Ocean

N. Tan; C. Dumas; G. Ramstein; J.-B. Ladant; C. Contoux
Towards Greenland Glaciation: cumulative or abrupt transition?

H. Ford; A. C. Ravelo
Pliocene estimates of tropical Pacific temperature sensitivity to radiative greenhouse gas forcing

R. Feng; B. Otto-Bliesner; T. Fletcher; A. Ballantyne; F. Li; S. Tilmes
Contributions to Pliocene Arctic warmth from a clean atmosphere and enhanced forest fire emissions
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Vegetation changes and human impact in the Azores Islands during the last ~700 years: the Lake Azul pollen record</td>
<td>V. Rull; A. Lara; M. J. Rubio-Inglés; S. Giralt; V. Gonçalves; P. Raposeiro; A. Hernández; G. Sánchez; D. Vázquez-Loureiro; R. Bao; P. Masqué; A. Sáez</td>
</tr>
<tr>
<td>26</td>
<td>Molecular biomarkers of anthropic impacts in natural archives</td>
<td>G. Camperio; S. N. Ladd; R. Lloren; M. Prebble; N. Dubois</td>
</tr>
<tr>
<td>27</td>
<td>Molecular traces of Anthropogenic and Climatic impact in Remote Oceania (MACRO)</td>
<td>T. Vegas-Vilarrúbia; P. Corella; N. Pérez-Zanón; T. Buchaca; M. C. Trapote; P. López; J. Sigro; V. Rull</td>
</tr>
<tr>
<td>28</td>
<td>Historical shifts in oxygenation regime as recorded in the laminated sediments of lake Montcortès (Central Pyrenees)</td>
<td>T. Vegas-Vilarrúbia; P. Corella; N. Pérez-Zanón; T. Buchaca; M. C. Trapote; P. López; J. Sigró; V. Rull</td>
</tr>
<tr>
<td>29</td>
<td>Climate variability, human use and landscape change of high mountain environments: Coma de Vaca and Ter valleys, Eastern Pyrenees</td>
<td>N. Haas; N. Belkina; D. Subetto; N. Dubois</td>
</tr>
<tr>
<td>30</td>
<td>The termination of the Africa Humid Period: review of Saharan and sub-Saharan climatic and archaeological data and implications for the Anthropocene</td>
<td>R. S. Anderson; A. Ejarque</td>
</tr>
<tr>
<td>31</td>
<td>Neolithic and Bronze Age pastoralism affects mountain forest dynamics in the Swiss Alps</td>
<td>M. Cremaschi; A. M. Mercuri; G. Zanchetta; A. Florenzano; P. Torri; A. Zerboni</td>
</tr>
<tr>
<td>32</td>
<td>Legacy of iron mining in central Sweden: pervasive impact of mining and land use over 1000 years</td>
<td>M. E. Rivas-Ruiz; M. Cao; J. P. Corella; A. Callegaro; T. Kirchgeorg; C. Barbante; A. Rosell-Mele</td>
</tr>
<tr>
<td>33</td>
<td>How politics shape agricultural landscapes: The plant wax record of Lake Lavijärvi, Russia Karelia</td>
<td>P. Rivas-Ruiz; M. Cao; J. P. Corella; A. Callegaro; T. Kirchgeorg; C. Barbante; A. Rosell-Mele</td>
</tr>
<tr>
<td>34</td>
<td>The overlooked human influence in the Late Holocene great acceleration of floods in the European Alps</td>
<td>N. Haas; N. Belkina; D. Subetto; N. Dubois</td>
</tr>
<tr>
<td>35</td>
<td>The overlooed human influence in the Late Holocene great acceleration of floods in the European Alps</td>
<td>E. Brisset; F. Guitierrez; C. Miramont; T. Troussier; Y. Poher; R. Cartier; F. Arnaud; E. Malet; E. J. Anthony</td>
</tr>
<tr>
<td>36</td>
<td>Millennial-scale geochemical records of anthropogenic impact and natural climate change in the Romanian Carpathians during the Holocene</td>
<td>M. Madella; S. Biagetti; E. Bortolini; C. Lancellotti; A. Zerboni; D. Zurro</td>
</tr>
<tr>
<td>37</td>
<td>Glacial-interglacial sedimentation in the Bohai Sea, China during the last 1 Ma: evidence from magnetostratigraphic and astronomical tuning dating core</td>
<td>M. Zarczyński; A. Bonk; T. Goslar; W. Tyllmann</td>
</tr>
<tr>
<td>38</td>
<td>Modern sediment fluxes in Lake Żabirska (northeastern Poland): A perspective from sediment trapping and limnological measurements</td>
<td>W. Tyllmann; A. Bonk; J. Pytel; M. Zarczyński</td>
</tr>
<tr>
<td>39</td>
<td>Sediment fluxes in Lake Żabirska (northeastern Poland): A 2000 year long perspective from annually laminated sediment core</td>
<td>W. Tyllmann; A. Bonk; J. Pytel; M. Zarczyński</td>
</tr>
<tr>
<td>40</td>
<td>Holocene sediment fluxes by running water in central Europe</td>
<td>S. Dreibrodt</td>
</tr>
<tr>
<td>41</td>
<td>Sediment Contribution in Different Spatial and Temporal Scale off Southwestern Taiwan since 50 kyr BP based on VNIR Reflectance Derivative Spectroscopy</td>
<td>H.-J. Pan; T. Yeo; C. Hwang; S. Cho; H.-J. Pan; T. Yeo; C. Hwang; S. Cho</td>
</tr>
<tr>
<td>42</td>
<td>Lake sedimentation rates over the Anthropocene: A quantitative synthesis</td>
<td>A. Medialdea; P. González-Sampériz; A. Moreno; J. Aranbarri; E. Iriarte; B. L. Valero-Garcés</td>
</tr>
<tr>
<td>43</td>
<td>Faleoenvironmental evolution and sediment fluxes of Conqueuzela lacustrine basin during the last glacial cycle based on luminescence dating and multiproxy analyses</td>
<td>T. Soo Chang; J. Cheul Kim; C. Soo Son; S. Soo Chun (Cornisa, France)</td>
</tr>
</tbody>
</table>

**FLUX**

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>95</td>
<td>Tropical climate dynamics through the Holocene using varve analysis from Yaal Chac, Mexico</td>
<td>N. Primmer; M. Jones; S. Metcalfe</td>
</tr>
<tr>
<td>96</td>
<td>Increased sedimentation following the Neolithic Revolution in the Southern Levant</td>
<td>Y. Lu; N. Waldmann; D. Nadel; S. Marco</td>
</tr>
<tr>
<td>97</td>
<td>A high resolution multiproxy fire reconstruction of an Eastern Iberian Lake, Estany de Montcortès, during the last millennium.</td>
<td>E. Brisset; F. Guitierrez; C. Miramont; T. Troussier; Y. Poher; R. Cartier; F. Arnaud; E. Malet; E. J. Anthony</td>
</tr>
<tr>
<td>98</td>
<td>The overlooed human influence in the Late Holocene great acceleration of floods in the European Alps</td>
<td>P. Rivas-Ruiz; M. Cao; J. P. Corella; A. Callegaro; T. Kirchgeorg; C. Barbante; A. Rosell-Mele</td>
</tr>
<tr>
<td>99</td>
<td>Millennial-scale geochemical records of anthropogenic impact and natural climate change in the Romanian Carpathians during the Holocene</td>
<td>M. Madella; S. Biagetti; E. Bortolini; C. Lancellotti; A. Zerboni; D. Zurro</td>
</tr>
<tr>
<td>100</td>
<td>Glacial-interglacial sedimentation in the Bohai Sea, China during the last 1 Ma: evidence from magnetostratigraphic and astronomical tuning dating core</td>
<td>M. Zarczyński; A. Bonk; T. Goslar; W. Tyllmann</td>
</tr>
<tr>
<td>101</td>
<td>Modern sediment fluxes in Lake Żabirska (northeastern Poland): A perspective from sediment trapping and limnological measurements</td>
<td>W. Tyllmann; A. Bonk; J. Pytel; M. Zarczyński</td>
</tr>
<tr>
<td>102</td>
<td>Sediment fluxes in Lake Żabirska (northeastern Poland): A 2000 year long perspective from annually laminated sediment core</td>
<td>W. Tyllmann; A. Bonk; J. Pytel; M. Zarczyński</td>
</tr>
<tr>
<td>103</td>
<td>Holocene sediment fluxes by running water in central Europe</td>
<td>H.-J. Pan; T. Yeo; C. Hwang; S. Cho; H.-J. Pan; T. Yeo; C. Hwang; S. Cho</td>
</tr>
</tbody>
</table>

**REG**

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Impacts of Climate Change and Variability on Food Security in Kenya.</td>
<td>H. Andang'o; P. Omondi</td>
</tr>
</tbody>
</table>
Saturday 13th May 2017

2 S. Garcés-Pastor; N. Cañellas-Boltà; A. Clavaguera; M. A. Calero; T. Vegas-Villarrubia
Palaeoenvironmental changes in Bassa Nera pond during the last millennium (Central Pyrenees)

3 B. Kriesche; M. Chaput; R. Kulik; K. Gajewski; V. Schmidt
Methodology for studying continental-scale Holocene human-vegetation interactions using archaeological and paleoenvironmental data

4 N. J. Velázquez; L. S. Burry; M. H. Fugassa
Pollin sources in studies of camelid coprolites from Patagonia (Argentina)

5 López-Sáez J. A.; Abel-Schaa D.; Iriarte E.; Alba-Sánchez F.; Pérez-Díaz S.; Guerra-Doce E.; Delibes de Castro G.; Abárquero Moras Francisco J.
A palaeoenvironmental perspective of prehistoric salt exploitation in the Villafáfila wetlands (Tierra de Campos, Zamora, Northern Iberia)

6 B. Kriesche; M. Chaput; R. Kulik; K. Gajewski; V. Schmidt
Methodology for studying continental-scale Holocene human-vegetation interactions using archaeological and paleoenvironmental data

7 U. Lombardo; L. Rodrigues; N. Zihlmann; J. Ruiz-Pérez; H. Veit
Pre-Columbian settlement patterns and landscape modification in the Bolivian Amazon since the early Holocene.

8 E. Dietze; M. Theuerkauf; M. Slowiński; CEL fire synthesis team
Holocene fire history of the Central European lowlands driven by interactions of climate, vegetation and land use change

9 P. Gell; M. Reid
Human-climate-environment interactions in the Murray River catchment: the case for a multi-faceted approach to waterway restoration

10 S. Pérez-Díaz; S. Nuñez de la Fuente; J. A. López
Human-Environment interactions in Northern Iberian Peninsula during the Middle Holocene: the role of farmers in the landscape configuration

11 P. Barreiro-Lostres; A. Moreno; S. Giralt; M. Morellón; P. González-Sampériz; P. Mata; P. Corella; G. Gil-Romera; M. Leunda; J. Áranbarri; C. Pérez; B. Valero-Garcés
Paleohydrology, climate and land-use changes during the last two millennia in the Iberian Peninsula

12 R. Kyarliik
Human environmental interactions during the late stone age and iron age interface at Kansyore Island Western Uganda

13 A.-K. Trondman; B. Pirzamanbein; M.-J. Gaillard; J. Lindström; A. Poska
Quantitative land-cover change in space and time over the Holocene in Europe for climate modelling: pollen-based reconstructions using the REVEALS model and statistical modelling for continuous gridded descriptions of past vegetation

14 M. Jones; L. Maher; T. Richter; Danielle Macdonald
Epipaleoecological human-climate-environment interactions in eastern Jordan: can local noise inform a regional signal?

15 M. J. Cárdenas; V. Iglesias; J. M. Capriles; C. Latore; J. Freeman; D. Byers; J. Finley; M. Cannon; A. Gil; G. Neme; E. Robinson; J. DeRose
PEOPLE 2K (PaleOclim and the PeopLing of the Earth): Investigating tipping points generated by the Climate-Human Demography-Institutional nexus

16 M. Madella; A. M. Bauer; R. Morrison
Land Use 6k: A First Assessment of South Asia

17 C. von Scheffer; I. Unkel; F. De Vleeschouwer
Environment, Climate and Human impact in the Central Alps since the last deglaciation: Small-scale mires as sedimentological and geochemical archives

18 E. Marinova; B. De Cupere; D. Frémondeau; P. Georgiev; I. Hristova; K. Nikov; H. Popov
Landscape and land use in south-eastern Bulgaria during the Late Bronze Age and Iron Age (1600 BC to 100/50 BC): a synthesis of bioarchaeological and geoarchaeological data

19 M. Theuerkauf; J. Coudenberg
The extended downscaling approach - using forward modelling to reconstruct vegetation patterns within landscapes

20 R. Ssemulende
Environmental variability of the Sangoan toolmaker at Sango Bay southern Uganda.

21 K. Klein Goldewijk
Anthropogenic land use change during the Holocene; HYDE 3.2

22 M. L. Cárdenas; Bronwen Whitney
The contribution of Palaeoecology to assess legacy of pre-historic human land-use and climate change on modern vegetation

23 R. Hughes
Land use in Classical Antiquity: How good are the global datasets? A case study in Roman Switzerland (1st century B.C.E. - 3rd century C.E.)

DATA

59 D. Kaufman; PAGES 2k Consortium
Data stewardship in the PAGES 2k project

60 L. Jonkers; E. Oliver; M. Stefan; K. Michal
The PAGES 2k paleoclimate data synthesis: curated database of paleoceanographic records over the last glacial cycle

61 P. Arnaud; C. Pigolot; P. Stéphan; M. Rosan; E. Godinho; B. Galabertier; A. Cailllo
From core referencing to data re-use: two French national initiatives to reinforce paleodata stewardship (National Cyber Core Repository and LTER France Retro-Observatory)

62 The French NATIONAL CYBER CORE REPOSITORY: a user-oriented approach to promote the referencing of scientific cores

63 A. Krishnarmurthy; P. Srinivasan; P. Venkatasesan; K. Muthukrishnan
Paleoecological database for South Asia: overview and challenges

64 J.-Y. Peterschmitt; S. Denvil; G. Levavasseur; M. Greenslade; A. Ben Nasser
The PH4C-CHIPS Database: using standards to successfully share and use climate model data

65 J. Ni; M. Liao; K. Li
Chinese Pollen Database: Current status and future plans
GENERAL INFORMATION

Venue: Auditorio de Zaragoza and Romareda Hotel
Four rooms for oral sessions in the Auditorium: Mozart, Luis Galve, Mariano Gracia and Room 11
Two rooms for oral sessions at the Romareda Hotel: Room 1 and Room 2
Several small rooms for group meeting in the Auditorium basement

Please be sure to wear your accreditation during the Congress

Wifi services are available for public access. User name: pages2017; Password: pages123

How to get there:
By tram –The tram is very convenient as runs North – South, through downtown and with stops close to the Auditorium (Plaza Emperador Carlos V and Romareda)

By bus – Line 35, 53 (Plaza Emperador Carlos V Station) and Line 42 (Isabel La Católica /Romareda Station)

FARES: Single Ticket: 1,35€/journey Bus Card: 7€ (2€ for deposit and 5€ charge for trips). If you use the card the fare is 0.74 €/journey.
A bus card is the way to go if you are going to use public transportation everyday. You can use the card with all the buses and also with the tram line. Bus Cards can be purchased at the AUZSA Customer Service Office at the Independencia Shopping Center (Centro Comercial Independencia, Paseo de la Independencia, 24-26, 50004 Zaragoza, Floor -1) and an AUZSA kiosk in Plaza Aragón.
By Taxi – You can hail a cab in the street or call to a taxi cab company (numbers below). Most of them, cash only, but ask the driver in advance.

Technical Secretariat
Technical Secretariat will be located in the Hipostila Area during the conference hours.
Contact Technical Secretariat at E-mail: pages2017@viajeseci.es; Telephone: 638 94 22 17
Contribution and attendance certificates will be sent by email after the event closed.

Registration
The Registration Desk will be located at the Auditorium. The opening hours are:
- Tuesday 9th May, at the Multiusos Hall, 18:00 – 21:00
- 10th – 13th May, at the Hipostila Room from 8:00 – 19:00

Attendees should check in at the registration desk to receive a program, name badge, and other registration materials.

Posters
Poster sessions will be held at the Hipostila Room. They should be put up during the morning of your poster session, before 10 am, on the board labeled with your poster number.
All posters must be removed immediately after each session. Any poster still on display after 19:30 will be discarded by the organizers.
Presenters should be in attendance during the allocated time for their session.

Talks
Talks will be held at the Auditorio and the Hotel Romareda in parallel sessions.
Each talk will be allocated 15 minutes, which includes 3 minutes for discussion.
Each room will be equipped with a laptop. Presentations can be made using Powerpoint, Keynote or Adobe software.
All talks must be uploaded the day before being presented.
You can check your presentation in the "Speakers/Presenters Room" located in Room 9 in the Auditorium basement. Please make use of this facility before your talk, as sometimes transferring to different systems/computers can cause display problems.
Please bring your presentation to the registration desk on Tuesday 9 May, 18:00-19:30 (during the Icebreaker, for talks given on Wednesday) and from Wednesday to Saturday from 08:00-19:00. Please go to the registration desk to upload your presentation the day before your scheduled talk, not earlier.

Coffee breaks and Lunches
Coffee breaks will be served in the Exhibition & Posters Area (Hipostila Area) between 10.30h to 11.00h
Lunches will be served in the Multiusos Room (Lunch Area) 13.00h - 15.00h, buffet style.
To access the Lunch Area you have to go outside the Auditorium, turn left and follow the signs to the lower level. You can also access from the basement level.
Lunch Area is wifi-free to encourage more personal interactions among attendees.
Those with special dietary requirements will have alternative menus and a designated area to get them. They will have to show their identification cards to the catering team.
Refreshments will be served during the evening poster sessions: 17:00-19:00 (May 10th-12th)

Insurance
The organizers cannot accept liability for personal accident, loss, or damage to private property, which may be incurred as a result of the participation in the PAGES meeting 2017.

Useful Telephones
International code: 00; Spanish code: 34
Emergencies: 112
Police: 092, 091
Taxis: +34 972 42 42 42, +34 976 75 75 75, +34 976 38 38 38
Bus station: +34 976 70 05 99
Renfe (Spanish Railway) – Customer service: +34 902 320 320
AENA (Spanish airports) - +34 902 404 704 / +34 91 321 10 00
1 Auditorium (main venue)
Eduardo Ibarra St., 3, 50009 Zaragoza

2 Hotel Romareda
Asin y Palacios, 13, 50009 Zaragoza

3 Cerbuna Cineforum
Pedro Cerbuna, 12, 50009 Zaragoza

4 Las Ocas terrace
Parque Grande José Antonio
Labordeeta, 50006 Zaragoza

5 Patio de la Infanta
San Ignacio de Loyola, 16, 50008 Zaragoza

6 Aura Restaurant
Avda. de José Atarés, 7, 50018 Zaragoza
Tuesday, 9 May

19:30-22:00 Icebreaker event
Meet and interact with fellow OSM participants in the Multiusos Room:

Auditorio de Zaragoza
“Multiusos Room/Lunch Area”
Eduardo Ibarra 3
50009 Zaragoza
www.auditoriozaragoza.com (in Spanish)

Drinks and finger food will be provided.
No registration necessary.

Wednesday, 10 May

19:30-22:00 Football (soccer) match
Registration to play on one of the two teams competing for the prestigious PAGES CUP is open at the Registration desk.

The match will be held at:

“Los Ocas” Terrace Bar & Playing Field
José Antonio Labordeta Park
(behind the conference venue, approx. 15 minutes walk)

Food and drinks will be available at the kiosk. A free beer and further discounts will be provided.
Thursday, 11 May

**19:30-21:30 Film night**

Watch Leonardo Di Caprio’s climate change documentary “Before the Flood”

**Location: Cine Club Cerbuna**
C/Pedro Cerbuna 12
50009 Zaragoza

The evening will be conducted in Spanish. Entry is on a “first-come, first-served” basis. The movie will be introduced by Zaragoza television weather presenter Eduardo Lolumo and the discussion after the movie will be led by Penélope González-Sampériz, IPE-CSIC. The film will be subtitled in Spanish.

Friday, 12 May

**20:30 Gala dinner**

The conference dinner, for registered participants, will be held at:

**Aura Restaurante**
Avenida de José Atarés 7
50018 Zaragoza

Saturday, 13 May

**19:30-21:30 Round-table discussion**

The theme of this evening’s discussion, which will be conducted in Spanish, is “Retos del cambio climático: de lo global a lo local” (Climate change: from global to local challenges).

**Location: Patio de la Infanta (Salón Aragón)**
C/San Ignacio de Loyola 1650008 Zaragoza

Invited speakers:
- William Fletcher, scientist from the University of Manchester.
- Jose Ramón Picatoste, representative from the Climate Change National Office.
- Consejero Joaquín Olona, from the Aragon Government (Department of Rural Development and Sustainability).
- Concejala Teresa Artigas, from the Zaragoza City Hall (Agency of Environment and Sustainability).
- The discussion will be led by Ana Moreno, IPE-CSIC.

You might like to visit the Renaissance Patio during your time in Zaragoza. Entry is free.
FIELD TRIPS POST MEETING

Short excursion (1 day: 14th May 2017)

Palaeoflood and historical flood records of the Segre River

Chairs: Gerardo Benito, Mayte Rico, Pablo Corella, Carles Balasch, Mariano Barriendos

Departure: 08,00 h. from Auditorio (Venue)

The Segre river is a Spanish Mediterranean river fed in the Pyrenees with a mixed runoff from rainfall and snowmelt sources. The palaeoflood hydrology of the Segre River was reconstructed from slackwater deposits, and supported with historical information and instrumental data. Extreme floods take place during the spring and more frequently autumn season according to the historical flood information. This field trip will visit some characteristic sites with historical flood marks and palaeoflood sedimentary records providing evidences on the timing and magnitudes of the largest flood events since the Late Pleistocene. Most of the sedimentary evidences are located along a 14 km-reach showing an excellent sedimentary records of palaeofloods deposited at six sedimentary environments, namely overbank, expansion, constriction, slope obstacles, valley-side alcoves, and caves. The visit requires a 5-6 km walk along a dirt road of low difficulty.

Geoarchaeology in the Holocene ephemeral streams of the Huerva River (Central sector of the Ebro Basin)

Chairs: José Luis Peña-Monné, Fernando Pèrez-Lambán, Mª Marta Sampietro-Vattuone, David Badia-Villas, Jesús Picazo-Millán

Departure: 09,00 h. from Auditorio (Venue)

The Huerva River is a tributary of the Ebro River, located in the central sector of the Ebro basin, close to Zaragoza city. Regional geologic bedrock is made of Miocene gypsum. Along the lower stretch of the Huerva River valley Holocene morphosediimentary archives, including slopes, infilled valleys (locally named vales)
and alluvial fans acquire great geoarchaeological relevance in a very sensitive geomorphic scenario. The results of different geomorphological, sedimentary, pedogenic, palynological and chronological (Luminiscence and Radiocarbon) approaches and archaeological studies allow reconstructing the paleoenvironmental evolution and human settlement since the Mesolithic to present. Two sedimentary aggradation phases in the slopes and three stages in the ephemeral streams were differentiated. The field trip shows several well studied geoarchaeological sedimentary archives. It is an excellent framework to discuss the role of the climate and the human action in the evolution of these semiarid colluvial alluvial systems.

**Pineta valley and La Larry paleolake: a juxta-glacial lacustrine record during the last glacial period (Pyrenees, Ordesa – Monte Perdido National Park)**

Chairs: Angel Salazar, Mª Pilar Mata, María Leunda, Miguel Bartolomé

**Departure: 07.00 h. from Meliá Zaragoza Hotel
Av. de César Augusto, 13, 50004 Zaragoza**

La Larri is a hanging glacial valley that drains through a spectacular set of waterfalls (Ordesa y Monte Perdido National Park, Pyrenees). A lateral moraine, deposited by the main glacier (Pineta valley), facilitated the deposition of juxta-glacial lacustrine sediments. This lacustrine record begins shortly before the global Last Glacial Maximum, but unequivocally after than the last local glacial maximum, and ends at the beginning of the Holocene due to the filling up of the lake. The trip starts and ends in Zaragoza and includes a short hike (2:30 h walk, 300 m of ascent). Walking shoes, sunglasses, sun block and a hat will be needed, and also a light waterproof storm jacket in the backpack (I hope that it will be inside all the day!).
Aim higher with the radiocarbon partner you can trust

✓ Expert technical consultation
✓ Unbeatable customer service
✓ Results reported in 3-14 days
✓ ISO/IEC 17025:2005-accredited

Since 1979 —

Radiocarbon Dating
Consistent Accuracy, Delivered on Time

Beta Analytic
www.radiocarbon.com
Itrax
The market leading core scanner
www.coxsys.se

Scanner for sediment cores with XRF multielement analysis for all elements Mg - U, plus x-ray radiography and high quality optical sample imagery

Impressive speed of analysis
Only Itrax offers XRF analyses at 1-3 seconds per point with good data quality for the full element range, and regardless of chosen lateral resolution. This opens for scanning with e.g. 0.2 mm lateral resolution in under two hours per core meter, or 1 cm resolution in under two minutes!

Good sensitivity and reproducibility across the element range
Itrax offers best sensitivity for the full range of elements, including light elements like Mg, Al and Si and all the way up to heavy elements like Mo, U and Rare Earth Elements

No trade off between speed and element range
Only one XRF scan is needed for determination of the full element range Mg-U with highest sensitivity, a feature that singles out the Itrax Core scanner.

Reliable data quality
Itrax offers the best available XRF system with very well defined and narrow element peaks for minimized interference, plus also low system noise. Together these features result in unsurpassed data quality. Add to this the very good quantitative capacity.

Spectra display
This feature puts the user in control of the XRF analysis, allowing for e.g. detection of diffraction phenomena. Automated spectra evaluation saves time. Sophisticated software gives the user feedback of data quality for each measuring point

Added data reliability and sample information with X-ray radiography
X-ray radiography sample imagery combines perfectly with XRF to allow for differentiation between e.g. layers and particles, and to reveal phenomena like element migration

Upgradability
Even the oldest instruments can be upgraded to today's performance, extending the instrument life and minimizing long time costs

No sample touch for best analytical performance
Only Itrax has a small detector nozzle that moves over the sample surface without contact. This gives outstanding performance with sloped or cracked samples, and spares the sample surface

Cutting edge XRF performance
Itrax has the fastest and most precise analyses you can get with capacity for handling over 1 Million counts per second, with excellent spectra quality.
### Avaatech XRF Core Scanner

- Higher resolution
- More counts
- Lower detection limits
- New guided user interface
- Advanced data processing
- Three channel 4K line scan camera

---

### Thermo Scientific

**253 Plus 10 kV Isotope Ratio MS**

Utilize the new gold standard in IRMS. The new Thermo Scientific™ 253 Plus™ yet again redefines high performance for isotope ratio mass spectrometry.

**EA IsoLink™ IRMS System**

Discover an automated, easy-to-use solution for elemental and isotope analysis with the Thermo Scientific™ EA IsoLink™ IRMS System.

**Delta Ray™ Isotope Ratio Infrared Spectrometer (IRIS)**

Utilize state-of-the-art mid-infrared spectroscopy with the Thermo Scientific™ Delta Ray™ Isotope Ratio Infrared Spectrometer (IRIS), which enables simultaneous determination of δ13C and δ18O.

---

**ThermoFisher Scientific**

- ELEMENT 2/XR High Resolution ICP-MS
- Helix MC Plus™ Noble Gas MS
- NEPTUNE Plus™ High Resolution ICP-MS
- TRITON Plus™ Thermal Ionization MS
EXPLORE THE ENVIRONMENT
WITH GEOTEK’S RANGE OF PRECISE MULTISENSOR CORE LOGGERS

ULTRA-SENSITIVE XRF SYSTEMS
- Light element identification down to Mg
- 0.1 mm to 100 mm scanning modes
- XRF surface mapping capability
- X-ray radiography and laminography

MODULAR GEOPHYSICAL CORE LOGGERS
- Accepts whole and split rock and sediment cores
- Multiple sensor platform including: density, Vp, natural gamma, electrical resistivity, magnetic susceptibility, XRF, NIR, RGB colour, and 5K VIS and UV photography

IF A CORE’S WORTH TAKING, IT’S WORTH LOGGING.....