

# EGU2016

## CL5.04 Program

### CL5.04 Integrated climate and landscape evolution analyses: bridging long proxy data time series and instrumental observation

Convener: Achim Brauer

Co-Conveners: Theresa Blume , Markus Schwab , Thomas Raab , Michał Słowiński , Martin Wilmking , Rik Tjallingii

[Orals](#) / Fri, 22 Apr, 13:30–17:00 / Room 0.31

[Posters](#) / Attendance Fri, 22 Apr, 17:30–19:00 / Hall X3

**Friday, 22 Apr 2016** Room: 0.31      Chairperson: Achim Brauer

- 13:30–13:45 [EGU2016-4494](#)  
**Investigating climatic and anthropogenic disturbance in continental peat archives of C Europe and W Siberia**  
 Mariusz Lamentowicz, Mariusz Gałka, Katarzyna Marcisz, Michał Słowiński, Piotr Kołaczek, Katarzyna Kajukała, and Vinent E.J. Jassey
- 13:45–14:00 [EGU2016-6209](#)  
**Classification and monitoring of reed belts using dual-polarimetric TerraSAR-X time series**  
 Iris Heine, Thomas Jagdhuber, and Sibylle Itzerott
- 14:00–14:15 [EGU2016-3157](#)  
**Improved understanding of Diatom stratigraphy in a varved sediment through lake monitoring and sediment trap data**  
 Dominique Beatrice Maier and Christian Bigler
- 14:15–14:30 [EGU2016-7814](#)  
**Impact of flood events on lacustrine carbonate isotope records**  
 Lucas Kämpf, Birgit Plessen, Stefan Lauterbach, Carla Nantke, Hanno Meyer, Bernhard Chaplign, Hannes Höllerer, and Achim Brauer
- 14:30–14:45 [EGU2016-4288](#)  
**Linking hydro-climate to the sediment archive: a combined monitoring and calibration study from a varved lake in central Turkey**  
 C Neil Roberts, Jonathan R Dean, Warren J Eastwood, Matthew D Jones, Samantha L Allcock, Melanie J Leng, Sarah E. Metcalfe, Jessie Woodbridge, and Hakan Yiğitbaşıoğlu
- 14:45–15:00 [EGU2016-556](#)  
**Determining the controls on  $\delta^{13}C$  of sedimentary organic matter in Lake Tiefer See (NE Germany) – an integration of sediment cores and monitoring data**  
 Nadine Dräger, Ulrike Kienel, Miriam Groß-Schmölders, Birgit Plessen, and Achim Brauer

Coffee break

**Friday, 22 Apr 2016 Room: 0.31**

Chairperson: Martin Wilmking

- 15:30–15:45 [EGU2016-4596](#)  
**Comparative microfacies studies on annually laminated lake sediments from lakes of different sizes in northern Germany- Palaeolimnological implications**  
**Stefan Dreibrodt**
- 15:45–16:00 [EGU2016-9846](#)  
**Climate or vegetation change – what drove Holocene lake level fluctuations in NE-Germany?**  
**Martin Theuerkauf, Theresa Blume, Janek Dreibrodt, and Ingo Heidbüchel**
- 16:00–16:15 [EGU2016-7321](#)  
**Climate-landform effects on lateglacial vegetation pattern in northeastern Tuchola Pinewoods (northern Poland): multiproxy evidence from the Lake Czechowskie catchment, northern Poland.**  
**Agnieszka M. Noryskiewicz, Jarosław Kordowski, Sebastian Tyszkowski, Mateusz Kramkowski, Izabela Zawiska, Monika Rzodkiewicz, Joanna Mirosław-Grabowska, Florian Ott, Michał Słowiński, Milena Obremska, Mirosław Błaszkiwicz, and Achim Brauer**
- 16:15–16:30 [EGU2016-14537](#)  
**Late Glacial and Holocene environmental history of Wielkopolska region (western Poland) recorded in sediments of Strzeszyńskie Lake and Kierskie Lake**  
**Krzysztof Pleskot, Witold Szczuciński, Rik Tjallingii, Mirosław Makohonienko, Norbert Nowaczyk, and Achim Brauer**
- 16:30–16:45 [EGU2016-15347](#)  
**A 911 year chronology from earlywood vessels of European oak in NE-Germany and its use for climate reconstructions**  
**Ingo Heinrich, Daniel Balanzategui, Karl-Uwe Heußner, Carola Pritzkow, Laura Giese, Johannes Graaf, Josephine Lindemann, Thomas Schirmer, Isabel Dorado Liñán, Tomasz Wazny, Tobias Scharnweber, Ernst Van der Maaten, Gerd Helle, Theresa Blume, and Silvio Pohlmann**
- 16:45–17:00 [EGU2016-8008](#)  
**A 430 year record of hydroclimate variability for NE-Germany based on stable carbon and oxygen isotopes from pine and oak tree rings**  
**Gerhard Helle, Heiko Baschek, Ingo Heinrich, Nadia Navabzadeh, Frank Riedel, Martin Wilmking, and Karl-Uwe Heußner**

**Poster in attendance Time: Friday, 22 Apr, 17:30–19:00, Hall X3**

Chairperson: Markus Schwab

- X3.193 [EGU2016-4926](#)  
**ICLEA - The Virtual Institute of Integrated Climate and Landscape Evolution Analyses**  
**Markus J. Schwab, Achim Brauer, Mirosław Błaszkiwicz, Theresa Blume, Sibylle Itzerott, Thomas Raab, Martin Wilmking, and the ICLEA Team**
- X3.194 [EGU2016-6888](#)  
**Practical aspects of registration the transformation of a river valley by beavers using terrestrial laser scanning**  
**Sebastian Tyszkowski, Mirosław Błaszkiwicz, Dariusz Brykała, Piotr Gierszewski, Halina Kaczmarek, Jarosław Kordowski, and Michał Słowiński**

- X3.195 [EGU2016-5637](#)  
**Hydrological and geomorphological consequences of beavers activity in the Struga Czechowska valley (Tuchola Pinewood Forest, Poland)**  
**Dariusz Brykała**, Piotr Gierszewski, Mirosław Błaszczewicz, Jarosław Kordowski, Sebastian Tyszkowski, Michał Słowiński, Michał Kaszubski, and Achim Brauer
- X3.196 [EGU2016-5736](#)  
**Lakes-paleolakes cascade system and its role in shaping the runoff and chemical properties of water in the young-glacial catchment - example from the Tuchola Pinewood Forest (Northern Poland)**  
**Piotr Gierszewski**, Dariusz Brykała, Michał Kaszubski, and Birgit Plessen
- X3.197 [EGU2016-3217](#)  
**A vast medieval dam-lake cascade in northern central Europe: review and new data on late Holocene water-level dynamics of the Havel River, Berlin-Brandenburg area (Germany)**  
Knut Kaiser, Nora Keller, Arthur Brande, Stefan Dalitz, Nicola Hensel, Karl-Uwe Heußner, **Christoph Kappler**, Uwe Michas, Joachim Müller, Grit Schwalbe, Roland Weiße, and Oliver Bens
- X3.198 [EGU2016-13849](#)  
**Fluctuating lake levels in humid climates: a suitable proxy of past precipitation?**  
**Martin Theuerkauf**, Mathias Küster, and Knut Kaiser
- X3.199 [EGU2016-197](#)  
**Multiple drivers of Holocene lake level changes at a lowland lake in northeastern Germany**  
**Elisabeth Dietze**, Michał Słowiński, Izabela Zawiska, Georg Veh, and Achim Brauer
- X3.200 [EGU2016-470](#)  
**Fire and man - reconstructing Holocene biomass burning in the central European lowlands**  
**Elisabeth Dietze**, Michał Słowiński, Angelica Feurdean, Nadine Dräger, Milena Obremaska, Florian Ott, Anna Pieńczewska, Martin Theuerkauf, and Achim Brauer
- X3.201 [EGU2016-6631](#)  
**Anthropogenic impact on the sediment record from Lake Czechowskie (N-Poland) based on heavy metal contents in combination with high-resolution pollen and varve data: Geochemical background vs enrichment history and landsurface changes**  
**Philipp Hoelzmann**, Michał Słowiński, Milena Obremaska, Florian Ott, and Achim Brauer
- X3.202 [EGU2016-5610](#)  
**Spatial analysis of charcoal kiln remains in the former royal forest district Tauer (Lower Lusatia, North German Lowlands)**  
**Alexandra Raab**, Anna Schneider, Alexander Bonhage, Melanie Takla, Florian Hirsch, Frank Müller, Horst Rösler, and Karl-Uwe Heußner
- X3.203 [EGU2016-11533](#)  
**History of human activity in last 800 years reconstructed from combined archive data and high-resolution analyses of varved lake sediments from Lake Czechowskie, Northern Poland**  
**Michał Słowiński**, Sebastian Tyszkowski, Florian Ott, Milena Obremaska, Halina Kaczmarek, Martin Theuerkauf, Sabine Wulf, and Achim Brauer
- X3.204 [EGU2016-5600](#)  
**Early Holocene lake ecosystem development in the southern Baltic lowlands**  
**Michał Słowiński**, Florian Ott, Mateusz Kramkowski, Agnieszka M. Noryśkiewicz, Izabela Zawiska, Nadine Dräger, Martin Theuerkauf, Christoph Hass, Milena Obremaska, Mirosław Błaszczewicz, Jarosław Kordowski, Rik Tjallingii, Monika Rzedkiewicz, Markus Schwab, and Achim Brauer

- X3.205 [EGU2016-16408](#)  
**Early- to Mid-Holocene environmental and climate changes in the southern Baltic lowland using XRF scanning data**  
Rik Tjallingii, Florian Ott, Nadine Dräger, Mateusz Kramkowski, Michal Slowinski, and Achim Brauer
- X3.206 [EGU2016-203](#)  
**Sedimentological characteristics of lake sediment of the Lake Jelonek (North Poland)**  
Mateusz Kramkowski, Anna Filbrandt-Czaja, Florian Ott, Michał Słowiński, Rik Tjallingii, Mirosław Błaszkiwicz, and Achim Brauer
- X3.207 [EGU2016-7049](#)  
**Regional climate signal modified by local factors - multi core study records (Lake Czechowskie region, N Poland)**  
Izabela Zawiska, Monika Rzodkiewicz, Agnieszka Noryśkiewicz, Mateusz Kramkowski, Milena Obremska, Florian Ott, Birgit Plessen, Rik Tjallingii, Michał Słowiński, Mirosław Błaszkiwicz, and Achim Brauer
- X3.208 [EGU2016-442](#)  
**Wind influence on the course of sedimentation processes of the laminated lacustrine sediments of Lake Czechowskie**  
Daria Wiśniewska, Mateusz Kramkowski, and Sebastian Tyszkowski
- X3.209 [EGU2016-4236](#)  
**Low-wind summers promote blooms of cyanobacteria in Lake Tiefer See, NE Germany**  
Ulrike Kienel, Georgiy Kirillin, Brian Brademann, Birgit Plessen, Nadine Dräger, and Achim Brauer
- X3.210 [EGU2016-7016](#)  
**Paleoenvironmental reconstruction using nitrogen and carbon contents and isotopes in lake sediments of Tiefer See, NE Germany**  
Birgit Plessen, Ulrike Kienel, Nadine Dräger, and Achim Brauer
- X3.211 [EGU2016-9842](#)  
**The new data on the seasonal distribution of diatoms in the Southern Baltic coastal lakes as a basis for diatom-based transfer functions to reconstruct past environmental changes in the Baltic coastal zone**  
Monika Rzodkiewicz, Grażyna Szpikowska, Michał Woszczyk, Anita Suchińska, Lubomira Burchardt, and Beata Messyasz
- X3.212 [EGU2016-9795](#)  
**Diatoms as paleoecological indicators of environmental change in the Lake Czechowskie catchments ecosystem (Northern Tuchola Pinewoods, Poland)**  
Monika Rzodkiewicz, Izabela Zawiska, Agnieszka Maria Noryśkiewicz, Milena Obremska, Florian Ott, Mateusz Kramkowski, Michał Słowiński, Mirosław Błaszkiwicz, and Achim Brauer
- X3.213 [EGU2016-378](#)  
**Refining the time span between the early Holocene Askja-S and Hässeldalen tephras through differential dating based on varve counting from Lake Czechowskie (N Poland)**  
Florian Ott, Sabine Wulf, Johanna Serb, Michał Słowiński, Milena Obremska, Rik Tjallingii, Mirosław Błaszkiwicz, and Achim Brauer
- X3.214 [EGU2016-1129](#)  
**Evaluating the timing of late Quaternary geomorphodynamics and soil formation: a review of geochronological data from northeastern Germany**  
Christoph Kappler, Knut Kaiser, Mathias Küster, Alexander Fülling, Oliver Bens, and Thomas Raab

- X3.215 [EGU2016-5754](#)  
**Late Holocene eolian fossilization of Podzols in Northeastern Germany**  
Florian Hirsch, Thomas Raab, Anna Schneider, and Klaus-Peter Wechler
- X3.216 [EGU2016-801](#)  
**Earthquake-ponded sediments as a high-resolution archive of Anthropocene climate change on the Fuyun Fault (Xinjiang, China).**  
Stephen Chua, Chris Gouramanis, Marie Etchebes, Yann Klinger, Mingxing Gao, Adam Switzer, and Paul Tapponnier
- X3.217 [EGU2016-15971](#)  
**Controls on tree water uptake and information storage in tree rings**  
Theresa Blume, Sonia Simard, Ingo Heidebüchel, Andreas Güntner, and Ingo Heinrich
- X3.218 [EGU2016-8126](#)  
**Impact of the 2013-2015 weather variability on seasonal growth dynamics and daily stem-size changes of three coexisting broadleaved tree species**  
Ernst van der Maaten, Jonas Pape, Marieke van der Maaten Theunissen, Tobias Scharnweber, Marko Smiljanic, and **Martin Wilmking**
- X3.219 [EGU2016-9136](#)  
**DendrometeR: analyzing the pulse of trees in R**  
Ernst van der Maaten, Marieke van der Maaten-Theunissen, Marko Smiljanic, Sergio Rossi, Sonia Simard, Annie Deslauriers, **Martin Wilmking**, and Olivier Bouriaud
- X3.220 [EGU2016-8223](#)  
**Warm & wet or warm & dry? - A tree-ring based drought reconstruction from the European lowlands with emphasis on the medieval climate anomaly**  
Tobias Scharnweber, Ingo Heinrich, Ernst van der Maaten, Karl-Uwe Heußner, and **Martin Wilmking**