

Poster presentations

PA1 Divergence phenomenon in dendroclimatology

PA1.01. Do biochemical and geochemical influences of acidic deposition affect dendroclimatic stability?

Kevin T. Smith, Walter Shortle, Paul Schaberg

PA1.02. Does age matter? A case study from the Iberian Peninsula

Isabel Dorado, Emilia Gutierrez, Ingo Heinrich, Elena Muntan, Laia Andreu, Filip Campelo, Gerd Helle

PA2 Reconstruction of past climate variations: a challenge for the present and future

PA2.01. Summer temperature fluctuations in the French Alps, AD 751–2008

Christophe Corona, Jean-Louis Edouard, Frédéric Guibal, Joel Guiot, André Thomas

PA2.02. A long oak chronology from Northwest Portugal: A work in progress

José Pedro Andrade, Joana Vieira, Filipe Campelo, Cristina Nabais

PA2.03. Tree-ring based climate reconstruction in western Mediterranean mountain regions (Corsica) in the Late Holocene

Timo Hetzer, Achim Bräuning, Joachim Kuhlemann, Michael Joachimski, Hubertus Leuschner, Monika Gancarz

PA2.04. Dendroclimatic reconstructions of summer precipitation from oak growth series in the Basque country

Emilia Gutierrez, Josue Susperregi

PA2.05. Pointer years in the northern Fennoscandian climate proxies

Emmi Hilasvuori, Risto Jalkanen, Tatjana Boettger, Michael Friedrich, Mary Gagen, Håkan Grudd, Björn Gunnarsson, Marika Haupt, Högne Jungner, Andreas Kirchhefer, Yury Kononov, Markus Lindholm, Neil Loader, Danny McCarroll, Iain Robertson, Eloni Sonninen, Giles Young

PA2.06. North Fennoscandian summer temperatures for the last millennium reconstructed from Scots pine maximum density

Håkan Grudd, Björn Gunnarsson, Paul Krusic, Anders Moberg, Risto Jalkanen, Andreas Kirchhefer, Hans Linderholm

PA2.07. Tree-growth and climate relations in the Tronador volcano, southern south America-Chile

Mabel Alsina, Duncan Christie, Maria Paz Peña, Antonio Lara

PA2.08. Subfossil Pilgerodendron wood at southern Chile, South America

Claudia Mansilla, Juan Carlos Aravena

PA2.09. A tree-ring based reconstruction of the Southern Bolivian Altiplano precipitation since A.D. 1300

Mariano Morales, Duncan Christie, Ricardo Villalba, Jaime Argollo, Antonio Lara, Jeanette Pacajes, Claudia Soliz

PA2.10. Dendrochronological analysis of selected spruce stands in the Drahaný highlands

Michal Rybníček, Eva Konasova, Tomas Kolar

PA2.11. Temperature reconstruction based on tree ring data in Yulin, Shandong

Yu Liu, Ying Lei, Hui Song

PA2.12. Temperature variations recorded in *Pinus tabulaeformis* tree rings from the southern and northern slopes of the central Qinling Mountains, central China

Yu Liu, Hans Linderholm, Huiming Song

PA2.13. Variation of solar activity during AD 1250–1750 indicated by radiocarbon content in tree rings of Korean conifers

Won-Kyu Park, Sang-Kyu Kim, Wan Hong, Jungheon Park

PA2.14. Studies with the Finnish 7644-year pine chronology

Mauri Timonen, Samuli Helama, Kari Mielikäinen

PA2.15. Variability of the air temperature in the north of Eurasia inferred from millennial tree-ring chronologies

Mukhtar Naurzbaev, Eugene Vaganov, Olga Sidorova, Olga Zykina

PA3 Tree rings and insects, diseases and anthropogenic factors

PA3.01. An insect outbreak network for Pandora moths across its entire range in the Western United States

Jim Speer

PA3.02. Long-term spruce budworm outbreak dynamics in the North American boreal forest inferred from subfossil trees

Sonia Simard, Hubert Morin, Cornelia Krause

PA3.03. Accelerated insect disturbance of forests in Alaska and dendrochronology

Glenn Juday

PA3.04. Influence of bamboo *Guadua* aff. *paraguayana* Doll (Poaceae) on the radial increment of *Sebastiania commersoniana* trees in remnant of a Mixed Ombrophilous Alluvial forests in southern Brazil

Paulo C. Botosso, Franklin Galvão, Gustavo R. Curcio, Patrícia M. Stasiak, Natacha Sobanski, Bruno P. Domanowski

PA3.05. Stand development patterns in declining *Austrocedrus chilensis* forests

Mariano Amoroso, Lori Daniels, Bruce Larson

PA3.06. Effect of the oak leafroller moth, *Tortrix viridana* L. on tree ring width of oak species, a case study: Iran's northwest forest

Abbas banj shafiei, Javad Eshaghi Rad, Ahmad Alijanpour, Majid Pato

PA3.07. Variation of diameter growth of beech (*Fagus orientalis* L.) and hornbeam (*Carpinus betulus* L.) after forest fire in Caspian forests (Iran)

PA3.08. Depression and recovery in growth of Scots pine (*Pinus sylvestris*) due to intensity of the local air pollution

Tomasz Zielonka, Natalia Dubaj, Piotr Malcher, Barbara Godzik

PA3.09. Radial growth of *Larix gmelinii* and the cyclicity of the Siberian moth (*Dendrolimus superans*)

Sanna Välimäki, Tuomas Aakala, Tiina Ylioja, Jing Li, Kari Heliövaara, Hannu Rita

PA3.10. Decline of pedunculate oak (*Quercus robur* L.) in Tammisto Park in southern Finland

Kristina Sohar, Samuli Helama, Juha Raisio, Alar Lääneld

PA3.11. Tree-rings reflecting environmental impacts of talc emission

Hannu Herva, Mauri Timonen, Raimo Sutinen

PA3.12. Dendrochronological study of conifer trees (*Larix*) artificially planted inside and outside of several cities at the Northern Europe

Oleg Shumilov, Elena Kasatkina, Mauri Timonen, Hannu Herva, Irina Kirtsideli, Alexandr Kanatjev

PA4 Climate-growth relationship of different tree species

PA4.01. Climatic signals and radial increment variation of Scots pine (*Pinus sylvestris* L.) and Norway spruce (*Picea abies* (L.) Karst.) in Estonia

Maris Hordo, Sandra Metslaid, Andres Kiviste

PA4.02. Climatic factor influence on Scots pine (*Pinus sylvestris* L.) radial and height growth in Järvselja: An Estonian case study

Sandra Metslaid, Ahto Kangur, Allan Sims, Maris Hordo, Andres Kiviste

PA4.03. The influence of climate on Scots pine growth on mires in Latvia

Iluta Dauskane

PA4.04. Growth trends in Finland – New results?

Kari Mielikäinen, Mauri Timonen, Samuli Helama, Hannu Herva, Tapio Huttunen

PA4.05. Daily temperature and daily photosynthetic production vs. Scots pine growth

Mikko Korpela, Pekka Nöjd, Jaakko Holmen, Harri Mäkinen, Mika Sulkava, Pertti Hari

PA4.06. Reactions of *Fagus sylvatica* and *Quercus spp.* to past climate extremes in Northeastern Germany and conclusions for their future performance

Tobias Scharnweber, Michael Manthey, Martin Wilmking, Christian Schröder, Andreas Bauwe, Christian Criegee, Stephan Glatzel, Bernd Lennartz

PA4.07. The manifestation of extreme ecological events in tree rings of beech and oaks in northern Bavaria (Germany)

Bruno Lasermann, Achim Bräuning

PA4.08. Austrian pine (*Pinus nigra* Arnold) tree-ring width chronologies from Albania

Tom Levanic, Ervin Toromani

PA4.09. Contrasting sensitivity of *Pinus canariensis* tree rings to local climate on north- and south-facing slopes on Tenerife, Canary Islands, Spain

Vicente Rozas, Gonzalo Perez de Lis, Ignacio García-González

PA4.10. Cool summers in Interior North America inferred from light rings in jack pine trees growing along the Manitoba Escarpment, Canada

Jacques Tardif, Martin Girardin, France Conciatori, Brock Epp

PA4.11. Solar-climatic cycles studied by tree growth rings in conifers from Holocene and Triassic

Alan Prestes, Nivaor Rodolfo Rigozo, Mario Tomazello Filho, Claudio Sergio Lisi, Daniel Jean Roger Nordemann, Cristiano Max Wrasse, Mariza Pereira de Souza Echer, Ezequiel Echer

PA4.12. Sol-Climate Relationship in tree-ring from Brazil

Nivaor R Rigozo, Claudio Lisi, Mario Tomazello Filho, Alan Prestes, Daniel JR Nordemann, Mariza PS Echer, Ezequiel Echer

PA4.13. Paleoclimate from tree-ring widths of *Picea morrisonicola* in Central Taiwan

Tzu-Tung Chen, William E. Wright, Kuo-Yen Wei

PA4.14. *Pseudotsuga wilsoniana* ring formation and climate in Taiwan

Li-Hsueh Chiang, William Wright, Biing T. Guan

PA4.15. Precipitation variations since 1857 A.D. inferred from tree-ring recorder of changling region in Gansu province

Yu Liu, Bo Sun, Huiming Song

PA4.16. The stem growth of *Quercus ilex* subs. *ballota* (Desf.) Samp. and *Quercus suber* L. in the province of Huelva. Influence of clima, soil, silvicultural and spatial parameters

Daniel Martin Perez, Reyes Alejandro Monge, Javier Vazquez Pique, R. Tapias

PA5 Teleconnections in the climate system from tree-rings and multiproxy records

PA5.01. Developing a multi-species dendrochronological network of long-lived species in Tasmania, Australia: *Athrotaxis* and the potential to reconstruct broadscale climate indices

Kathryn Allen, Patrick Baker, Rohan Simkin

PA5.02. A possible teleconnection between the summer North Atlantic Oscillation (SNAO) and climate in East Asia over the last 500 years

Hans W Linderholm, Tinghai Ou, Jee-Hoon Jeong, Yu Liu, Chris Folland

PA5.03. Dendrochronology in Israel: Preliminary results and future prospects

Brita Lorentzen, Sturt W. Manning, Carol B. Griggs, Tomasz Wazny, Jessica M. Herlich, William Guerra

PB1 New techniques and statistical approaches for detecting environmental signals and predicting forest growth

PB1.01. Dendrochronology in R with the dplR library

Andrew Bunn, Franco Biondi

- PB1.02.** Interactive technologies in dendroclimatic researches
Vladimir Shishov, Natalia Petrova, Viktor Il'in
- PB1.03.** A three-step procedure in SAS to analyze the time series from automatic dendrometers
Annie Deslauriers, Sergio Rossi, Audrey Turcotte, Hubert Morin, Cornélia Krause
- PB1.04.** Method comparison and reconstruction of canopy-disturbance histories in the Big Woods of Minnesota, USA
Julia Rauchfuss, Susy Ziegler
- PB1.05.** Determination of density profiles in wood tissue from radiography
Håkan Grudd, Anders Rindby, Ulf Büntgen, Björn Gunnarson, Björn Günther, Alexander Kirilyanov, Daniel Nievergelt
- PB1.06.** Comparisons of subseries trend-changes in Tree-ring index for 7630 years in Finland with those in southwest of USA
Jianmin Jiang, Mauri Timonen, Matti Eronen, Samuli Helama, Kari Mielikäinen
- PB1.07.** Internet Virtual Database Lab (MELTIH) project
Tapio Timonen, Mauri Timonen, Hannu Herva, Kari Mielikäinen, Samuli Helama
- PB1.08.** Tree-Ring Data Standard (TRiDaS)
Peter Brewer, Esther Jansma, Ivo Zandhuis

PB2 Tree rings and natural hazards in a changing climate

- PB2.01.** Dendrogeomorphology and dendrochronology revealing recent snow-avalanche activity in Upper Nordfjord, western Norway
Armelle Decaulne, Ólafur Eggertsson, Katja Laute, Achim A. Beylich
- PB2.02.** The Euro-Dendro project – Snow-avalanche and debris-flow frequency in European Middle Mountain unravelled by dendrogeomorphological analyses
Armelle Decaulne, Ólafur Eggertsson, Þorsteinn Sæmundsson, Katja Laute, Achim A. Beylich, Olimpiu Pop, Emmanuelle Defive, Sébastien Larrue
- PB2.03.** The influence of volcanic eruptions on tree growth in Central and Southern Europe during the last 1000 years
Ingo Heinrich, Hagen Pieper, Karl-Uwe Heußner, Gerd Helle
- PB2.04.** Multi-proxy analysis in reassessment of the 1902 event in northern Fennoscandia
Risto Jalkanen, Tarmo Aalto, Mary Gagen, Håkan Grudd, Emmi Hilasvuori, Högne Jungner, Markus Lindholm, Neil Loader, Danny McCarroll, Iain Robertson, Hannu Salminen, Eloni Sonninen
- PB2.05.** Dendrogeomorphic reconstruction of spring floods using injured broad-leaved trees
Estelle Arbella, Markus Stoffel, Alejandro Casteller, Ricardo Villalba, Brian H. Luckman, Fritz Schlunegger
- PB2.06.** Dendrogeomorphic reconstruction of past debris-flow activity using injured broad-leaved trees
Estelle Arbella, Markus Stoffel, Michelle Bollschweiler
- PB2.07.** Forest cover – A spatio-temporal marker of landslide activity
Jérôme Lopez Saez, Laurent Astrade, Christophe Corona, Markus Stoffel, Frédéric Berger, Philippe Schoeneich
- PB2.08.** Reconstruction of the debris-flow history of a small alpine torrent of the French Prealps using dendrogeomorphic methods
Jérôme Lopez Saez, Alexandra Gotteland, Markus Stoffel, Philippe Schoeneich
- PB2.09.** An assessment of deep landslide activity in the Transylvanian Depression (Romania) with tree rings
Virgil Surdeanu, Olimpiu Traian Pop, Markus Stoffel, Titu Anghel, Marius Dulgheru
- PB2.10.** Quantifying erosion on steep marly hillslopes (Draix, Haute-Provence, France) by means of anatomical changes in exposed tree roots
Christophe Corona, Georges Rovera, Jérôme Lopez Saez, Markus Stoffel, Laurent Astrade

- PB2.11.** Applied debris-flow modeling using dendrogeomorphic data: A case study from the Swiss Alps
Christoph Graf, Markus Stoffel, Adrienne Grêt-Regamey, Michelle Bollschweiler
- PB2.12.** Trends and changes in debris-flow occurrence – A regional reconstruction based on tree rings
Michelle Bollschweiler, Markus Stoffel
- PB2.13.** Dendrogeomorphic investigation of debris-flow activity in the Patagonian Andes
Alejandro Casteller, Markus Stoffel, Estelle Arbellay, Sebastian Crespo, Ricardo Villalba, Brian Luckman, Michelle Bollschweiler
- PB2.14.** Rockfall activity at the base of a rockfall talus slope in the El Chaltén region, southern Patagonia, Argentina
Markus Stoffel, Alejandro Casteller, Estelle Arbellay, Ricardo Villalba, Brian H. Luckman
- PB2.15.** Use of dendrochronological and radiocarbon methods for dating a volcanic event in the Lake District, northern Patagonian Andes
Alejandro Casteller, Markus Stoffel, Sebastian Crespo, Estelle Arbellay, Ricardo Villalba, Barbara Mayer
- PB2.16.** Wood anatomical features of *Austrocedrus chilensis* and *Pseudotsuga menziesii* related to debris-flow activity: A case study near San Carlos de Bariloche, Argentina
Alejandro Casteller, Markus Stoffel, Estelle Arbellay, Sebastian Crespo, Ricardo Villalba, Barbara Mayer
- PB2.17.** The dendrochronological age of ancient timbers of Casa de la Moneda (Segovia, Spain) and its relationship with historic flood events M. Génova

PB3 Stable isotopes and dendrochemistry in trees as indicators of environmental change

- PB3.01.** Processes of carbon isotope signal transfer from leaves to tree rings
Akira Kagawa
- PB3.02.** An inter-site comparison of stable isotopes ($\delta^{13}\text{C}$, $\delta^{18}\text{O}$) in tree-ring series of *P. heldreichii* and *P. heldreichii* var. *leucodermis* from Mount Vihren, Bulgaria and Monte Pollino, Italy
Gerhard Helle, Karsten Grunewald, Luigi Todaro, Antonio Saracino, Thomas Wieloch
- PB3.03.** A novel device for batch isolation of cellulose from tree-rings
Thomas Wieloch, Gerhard Helle, Carmen Bürger, Michael Voigt, Ingo Heinrich
- PB3.04.** Isotope pathway from the atmosphere to the tree ring along a humidity gradient in Switzerland
Kerstin Treydte, Sonja Boda, Giovanna Battipaglia, Arthur Gessler, Elisabeth Graf-Pannatier, Matthias Saurer, Rolf Siegwolf
- PB3.05.** Does CO_2 degassing from mofettes influence growth and isotopic composition of tree rings?
Ingo Heinrich, Christine Seeber, Horst Kämpf, Gerd Helle
- PB3.06.** The influence of climate on the $^{13}\text{C}/^{12}\text{C}$ and $^{18}\text{O}/^{16}\text{O}$ ratios in tree ring cellulose of *Pinus sylvestris* growing in central Scandinavian Mountains
Kristina Seftigen, Hans Linderholm, Yu Liu, Neil Loader
- PB3.07.** *Larix decidua* tree rings as indicators of vehicular traffic through the Mont Blanc Tunnel
Giovanni Leonelli, Paolo Cherubini, Giovanna Battipaglia, Umberto Morra di Cella, Matthias Saurer, Rolf Siegwolf, Manuela Pelfini, Giovanni Leonelli
- PB3.08.** Pooling vs. individual measurements in stable isotope ($\delta^{13}\text{C}$ and $\delta^{18}\text{O}$) chronologies
Isabel Dorado, Emilia Gutierrez, Ingo Heinrich, Laia Andreu, Octavi Planells, Elena Muntan, Gerd Helle
- PB3.09.** Stable carbon isotope ratios of α -cellulose in *Pinus tabulaeformis* carr. from Qinling Mountains: Variability and signal-strength
Yu LIU, Ruiyuan Wang
- PB3.10.** Isotopic signatures of global change and Little ice age in the South Iberian peninsula using tree growth rings of *Pinus nigra*
Sonia Granados Paez, Antonio Delgado Huertas
- PB3.11.** Isotopic dendroclimatology in the national park of doñana: Effects of global change
Sonia Granados Paez, Antonio Delgado Huertas

PB3.12. D/H in tree growth rings: A potential tool for paleoclimatic reconstructions in the Iberian peninsula

Sonia Granados Paez, Antonio Delgado Huertas

PB3.13. Comparison of stable isotopes of carbon in cellulose and total wood in tree growth rings of *Eucalyptus globulus*

Sonia Granados Paez, Antonio Dealgado Huertas

PB4 Forest fires in changing climate

PB4.01. Climate and fire history in Mongolia

Peter M Brown, Amy E Hessel, Baatarbileg Nachin, Neil Pederson, Thomas Saladyga, Byambagerel Suran

PB4.02. Fire and forest history across forest gradients in the western US

Peter M Brown

PB4.03. A Fire and Climate Synthesis (FACS) for Western North America Using Tree Rings and Documentary Sources

Thomas Swetnam, Peter Brown, Timothy Brown, Donald Falk, Emily Heyerdahl, Elaine Sutherland

PB4.04. Historical fires regimes in red pine forests of Eastern North America

Igor Drobyshchev, Yves Bergeron

PB4.05. Snow gum (*Eucalyptus pauciflora*) stand dynamics: The use of modern crossdating methods to reconstruct historical relationships between climate and fire

Jessica Davies, Patrick Baker, Rohan Simkin

PB4.06. Impacts of wildfire intensity on *Pinus canariensis* tree-ring growth on Tenerife Island, Canary Islands, Spain

Gonzalo Perez de Lis, Ignacio García-González, Vicente Rozas

PB4.07. Forest fire occurrence connected to meteorological and solar activity in 1958–2007 at Kola Peninsula

Oleg Shumilov, Elena Kasatkina, Nikolay Knyazev, Natalja Lukina

PC1 Treeline and northern tree rings in climate change research

PC1.01. Building of long tree-ring chronologies for reconstruction of a climate of Altai-Sayan region for two last millennia

Vladimir Myglan, Oksana Gerasimova

PC1.02. Spontaneous recruitment of *Pinus nigra* at high elevation in central Italian Apennines: A climate- or anthropogenic new treeline?

Alma Piermattei, Luca Bagnara, Carlo Urbinati

PC1.03. The soggy road to an 8000-year Scottish pine chronology

Rob Wilson, Neil Loader, Anne Crone, Coralie Mills, Colin Edwards, Miloš Rydval

PC1.04. Are shrubs paving the way for trees? – Growth responses of *Picea glauca* to climate change might be influenced by shrubby vegetation

Bettina Ohse, Martin Wilmking, Martin Hallinger

PC1.05. Scots pine (*Pinus sylvestris* L.) has advanced 35 km since 1920's in Western Finnish Lapland

Mari Kuoppamaa, Vesa Juntunen, Seppo Neuvonen, Mauri Timonen, Marja-Liisa Sutinen, Samuli Helama, Raimo Sutinen

PC1.06. Macrofossils challenge ubiquitous birch-pine-spruce succession in Finnish Lapland

Raimo Sutinen, Matti Piekkari, Hannu Herva, Ilkka Aro, Tapio Muurinen, Samuli Helama, Mauri Timonen

PC1.07. Altitudinal forest expansion through change detection of historical aerial photographs

Maarit Middleton, Paavo Närhi, Marja-Liisa Sutinen, Mauri Timonen, Raimo Sutinen

PC2 Wood anatomy as an indicator of environmental factors

PC2.01. Needle retention and needle longevity dynamics of Scots pine since 1560 revealed by the Needle Trace Method

Risto Jalkanen, Tarmo Aalto, Pekka Närhi, Reino Vierelä

- PC2.02.** Climatic signals in English oak *Quercus robur* in tree-rings and earlywood vessels in Latvia
Roberts Matisons, Guntis Brumelis
- PC2.03.** Experimental exposure and recovery of Spruce roots
Agata Buchwal, Elzbieta Gorczyca, Joanna Korpak, Piotr Waldykowski, Dominika Wronska-Walach
- PC2.04.** Tangential rows of traumatic resin ducts in dendrogeomorphic research
Markus Stoffel, Michelle Bollschweiler
- PC2.05.** Cambial resistance to water stress and defoliation
Sonia Simard, Sergio Rossi, Annie Deslauriers, Hubert Morin, Cyrille Rathgeber
- PC2.06.** Vessel characteristics of Oriental beech (*Fagus orientalis*) in the Alborz Mts., north Iran, and their ecophysiological evidence – An explorative study
Neda Lotfian, Dieter Eckstein
- PC2.07.** Frequent intra-annual wood anatomical features in *Larix sibirica* growing in the drought-stressed forest-steppe ecotone of northern Mongolia
Khishigjargal Mookhor, Dulamsuren Choimaa, Hanns Hubert Leuschner
- PC2.08.** *Raulinoa echinata* R. S. Cowan (Rutaceae): Ecological wood anatomy of root and stem in Santa Catarina, Brazil
Greice Campos-Moresco, Tiana Mara Custódio, Morilo José Rigon Júnior, Karin Esemann-Quadros
- PC2.09.** Anatomical characteristics and wood density components of sessile oak (*Quercus petraea* Liebl.) in East Germany
Björn Günther, Ernst Bäucker, C.-T. Bues

PC3 Dendroecology of shrubs

- PC3.01.** ‘Small trees’ from Northeast Greenland
Claudia Baittinger, Mads C. Forchhammer, Johannes Kollmann, Niels M. Schmidt
- PC3.02.** Tree-ring growth and wood anatomy of Mediterranean sub-shrubs
J. Julio Camarero, Sara Palacio, Gabriel Montserrat-Martí
- PC3.03.** The fine lines of pleasure and pain – Unravelling the tree ring record of *Podocarpus lawrencei*
Matthew Brookhouse
- PC3.04.** Growth rings and age in *Vella pseudocytisus* subsp. *pau*
Mar Génova, Juan Carlos Moreno, M^a Jesica Sánchez, Felipe Domínguez
- PC3.05.** Dendroclimatology of two mediterranean shrubs species:
Cistus ladanifer L. and *Retama sphaerocarpa* L. (Boiss)
Daniel Patón, Javier Cuenca, Juan Alberto Gala, Jose Carlos Escudero
- ~~**PC3.06.** *Salix reticulata* (L.) – Wood anatomy and application for the High Arctic environmental research
Piotr Owezarek~~

PC4 Intra-annual cambium dynamics and wood formation

- PC4.01.** Age-dependent xylogenesis in timberline conifers
Sergio Rossi, Annie Deslauriers, Tommaso Anfodillo, Marco Carrer
- PC4.02.** Xylogenesis in black spruce on two sites in the boreal forest of Quebec: The importance of temperature for the onset and duration of cell differentiation
Carlo Lupi, Hubert Morin, Annie Deslauriers, Sergio Rossi
- PC4.03.** Tree growth dynamics in tropical forests in Southern Ecuador derived from high-resolution dendrometer measurements
Franziska Volland-Voigt, Achim Bräuning
- PC4.04.** Wood formation, girth trunk increment and phenology of two tree species from Atlantic rain forest in southern Brazil growing in two different soil conditions
Paulo C. Botosso, Fernanda C.G. Cardoso, Marcia C.M. Marques, Renato Marques

- PC4.05.** Does tree size matter? Evaluating the climate-growth relationship of *Agathis australis* (kauri) using high-resolution dendrometer bands
Jan Wunder, Jan Wunder, Anthony M. Fowler, Shane P. J. McCloskey, Shane P. J. McCloskey
- PC4.06.** Factors regulating cambial reactivation and re-initiation of xylem differentiation
Yuichiro Oribe, Yoshio Kijidani, Shahanara Begum, Takafumi Kubo, Ryo Funada
- PC4.07.** Relationship between intra-annual changes in tree-ring structure and leaf phenology of ring-porous species (*Quercus serrata* and *Robinia pseudacacia*)
Kayo Kudo, Yoshihiro Hosoo, Koh Yasue
- PC4.08.** The comparison of four different tree species in Munessa Forest (Ethiopia): Seasonal growth dynamics and their climatic control
Julia Krepkowski, Achim Bräuning, Aster Gebrekirstos
- PC4.09.** Intra and interregional variability in the diametric growth of Holm oak (*Quercus ilex* subs. *ballota* (Desf.) Samp.): Influence of climate and soil factors through the combination of continuous and monthly measurements
Javier Vázquez-Piqué, Sonia Roig, Reyes Alejano, Raquel Benavides, Daniel Martín, Aranzazu González-Pérez
- PC4.10.** Age-dependent xylogenesis of *Pinus pinaster* in a drought limited environment
Joana Vieira, Cristina Nabais, Filipe Campelo, Helena Freitas, Sergio Rossi
- PC4.11.** Phenology of cambial activity and wood formation of cork oak (*Quercus suber* L.) in the south of Spain
Arantazu González-Pérez, Javier Vázquez-Piqué
- PC4.12.** A new experimental system for elucidating increased temperature effects on cambium phenology
Giovanni Emiliani, Mario Lanini, Maria Laura Traversi, Alessio Giovannelli
- PC4.13.** Effects of extended growing season in 2007 on intra-annual growth dynamics of *Pinus sylvestris* and *Pinus cembra* at their climatic limits in the Alps
Andreas Gruber, Gerhard Wieser, Walter Oberhuber
- PC4.14.** Seasonal dynamics of phloem formation in *Larix decidua* and *Picea abies* growing along an altitudinal gradient in Switzerland
Patrick Fonti, Julia Franzen, Gregory King, David Frank, Katarina Cufar, Jozica Gricar
- PC4.15.** Intra-annual dynamics of wood formation for three conifer species (Norway spruce, Scots pine and silver fir) in the northeast of France
Henri Cuny, Cyrille Rathgeber, Meriem Fournier
- PC4.16.** What is triggering the activities of meristematic tissues of Scots pine (*Pinus sylvestris* L.) during the recent past?
Jeong-Wook Seo, Dieter Eckstein, Risto Jalkanen, Uwe Schmitt, Hannu Salminen
- PC4.17.** Predicting day-to-day stem diameter variations and annual growth of balsam fir (*Abies balsamea* (L.) Mill.) from daily climatic variables
Louis Duchesne, Daniel Houle

PC5 Landscape dynamics and climate change

- PC5.01.** Dendrochronological study on sub-fossil pine and oak from a bog near Hannover
Inke Achterberg, Andreas Bauerochse, Hanns Hubert Leuschner, Bernhard Birkholz, Jan Eckstein
- PC5.02.** Tree layer structure in ecotones forest-tundra at the Kola peninsula
Isaeva Liudmila, Urmanavichus Gennady, Hofgaard Annika
- PC5.03.** Impact of recent warming on Arctic willow (*Salix arctica* Pall.) in the High Arctic: Comparison of sites in Greenland and Canada
Noémie Boulanger-Lapointe, Niels M. Schmidt, E. Lévesque, Claudia Baittinger, Mads C. Forchhammer, S. Boudreau, J. Kollman

PD1 Past and contemporary environment- human interactions

- PD1.01.** Dendrochronological and sedimentological cross-dating – Making use of talkative timber and communicative clay
Samuli Helama

- PD1.02.** Coherence of pine chronologies in the Baltic region through the last eight centuries
Alar Läänelaid, Samuli Helama, Dieter Eckstein, Jaak Jaagus
- PD1.03.** A millennium history of pine growth fluctuations in the surroundings of Vilnius (Lithuania): Natural forcing versus human impact
Rutile Pukiene
- PD1.04.** Tree-ring chronology of Scots pine (*Pinus sylvestris* L.) from Nesvizh castle XVI-XIX cc.
Maxim Yermokhin
- PD1.05.** Monitoring the Bunker Cave in the Sauerland (Germany): Implications for speleothems as climate archives
Dana Felicitas Christine Riechelmann, Detlev Konrad Richter, Andrea Schröder-Ritzrau, Tobias Kluge, Christoph Spötl
- PD1.06.** A network of 225 medieval to baroque roof constructions of churches in Austria – Basic knowledge for the conservation of Wooden Cultural Heritage
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*Karina Hennig, Gerhard Helle, Burkhard Neuwirth, Ingo Heinrich, Oka Karyanto,
Rosanne D'Arrigo, Mathias Winiger*