# PROGRAMME

**TRACE 2024** – Tree Rings in Archaeology, Climatology and Ecology

# the annual meeting and international conference of the Association for Tree-Ring Research (ATR)

# BRAȘOV, ROMANIA, 3 - 8 JUNE 2024

# Local organizing committee:

Ana-Maria Hereş, Ion Catalin Petritan, Elena Ciocîrlan, Mihai Daniel Niță Faculty of Silviculture and Forest Engineering, Transilvania University of Braşov

# WORKSHOPS: MONDAY, 03 OF JUNE 2024

PLACE: Faculty of Silviculture and Forest Engineering, Transilvania University of Braşov

**ADDRESS:** Sirul Beethoven, nr. 1, corpul "S", 500123 Brasov. If you get lost, just ask for **Poarta Ecaterina** (see the *TRACE2024\_Brasov\_Locations* document) ... we will be there waiting for you.

Schedule	Workshop title / Led by	Workshop title / Led by
08:30 -10:00 10:00 - 10:30 (coffee break) 10:30 - 12:00	<b>Blue Intensity for Historical Dating</b> / <b>Rob Wilson</b> (University of St. Andrews, UK)	<ul> <li>Diagnosing the Technological Quality of Wood by Means of Tree Rings /</li> <li>Mariana Domnica Stanciu (Faculty of Mechanical Engineering, Transilvania University of Braşov, Romania) &amp; Florin Dinulică (Faculty of Silviculture and Forest Engineering, Transilvania University of Braşov, Romania)</li> </ul>
12:00 - 14:30	LUNCH B	REAK
14:30 – 16:00 16:00 – 16:30 (coffee break) 16:30 – 18:00	<b>Blue Intensity for Historical Dating</b> / <b>Rob Wilson</b> (University of St. Andrews, UK)	<ul> <li>Diagnosing the Technological Quality of Wood by Means of Tree Rings /</li> <li>Mariana Domnica Stanciu (Faculty of Mechanical Engineering, Transilvania University of Braşov, Romania) &amp; Florin Dinulică (Faculty of Silviculture and Forest Engineering, Transilvania University of Braşov, Romania)</li> </ul>

# **WORKSHOPS**: TUESDAY, 04 OF JUNE 2024

PLACE: Faculty of Silviculture and Forest Engineering, Transilvania University of Braşov

**ADDRESS:** Sirul Beethoven, nr. 1, corpul "S", 500123 Brasov. If you get lost, just ask for **Poarta Ecaterina** (see the *TRACE2024\_Brasov\_Locations* document) ... we will be there waiting for you.

Schedule	Workshop title / Led by	Workshop title / Led by	
08:30 -10:00 10:00 - 10:30 (coffee break) 10:30 - 12:00	Dendro-Statistics / Jernej Jevšenak (Technical University of Munich, Germany; Department for Forest and Landscape Planning and Monitoring, Slovenian Forestry Institute, Slovenia)	The Use of Dendrometers for Monitoring Intra- Annual Growth Patterns and Drought Stress / Roberto L. Salomón (Departamento de Sistemas y Recursos Naturales, Research Group FORESCENT, Universidad Politécnica de Madrid, Spain) & Antonio Gazol (Instituto Pirenaico de Ecología (IPE-CSIC), Spain)	
12:00 - 14:30	LUNCH BREAK		
14:30 – 16:00 16:00 – 16:30 (coffee break) 16:30 – 18:00	Dendro-Statistics / Ernst van der Maaten (Chair of Forest Growth and Woody Biomass Production, TU Dresden, Germany)	Design and Deliver Effective Scientific Presentations / Alan Crivellaro (Department of Agricultural, Forest and Food Sciences – DISAFA, University of Torino, Italy)	
19:00	ICE-BREAKER (JUNO Wine Garden; După Ziduri, Brașov 500026; see the TRACE2024_Brasov_Locations document) & REGISTRATION		

#### WEDNESDAY, 05 OF JUNE 2024

# **CONFERENCE VENUE**: Aula Sergiu Chiriacescu

ADDRESS: 41 A Iuliu Maniu Street, Brasov, 500091 (see the *TRACE2024\_Brasov\_Locations* document)

08:00 - 09:00	REGIS	STRATION & HANGING of POSTERS
09:00 - 09:30	CONFERENCE OPENING – Alexandru Lucian Curtu, dean of the Faculty of Silviculture and Forest Engineering, Transilvania University of Braşov	
	Climate sensiti	vity of tree growth (first part)
	Session chairs: Isabel Dora	do-Liñan, Evrim A. Sahan & Stefan Klesse
09:30 - 09:42	Andrei Popa	Divergent temporal shifts in climate sensitivity of Norway spruce along an elevational and continentality gradient in the Carpathians ( <b>O1; student</b> )
09:42 - 09:54	Inga K. Homfeld	Assessment of climate signal of multiple tree growth parameters in <i>Pinus</i> sylvestris ( <b>O2</b> ; student)
09:54 - 10:06	Enrico Tonelli	Variation in radial growth sensitivity to drought among fine-scale gene pools of common yew ( <i>Taxus baccata</i> L.) in central Italy ( <b>O3; professional</b> )
10:06 - 10:18	Rupesh Dhyani	Deciphering climate and disturbance impact on tree growth in the Lesser Caucasus: Insights from a tree ring blue intensity network ( <b>O4; student</b> )
10:18 - 10:30	Samresh Rai	Contrasting impacts of climate warming on Himalayan hemlock growth: Seasonal and elevational variations ( <b>O5</b> ; student)
10:30 - 10:42	Liangjun Zhu	Permafrost melting enhances growth but leads to less intra-annual density fluctuations in boreal <i>Larix gmelinii</i> forests ( <b>O6; professional</b> )
10:42 - 11:00	Summary and discussion	
11:00 - 11:30		Coffee break
	Climate sensitiv	ity of tree growth (second part)
Session chairs: Isabel Dorado-Liñan, Evrim A. Sahan & Stefan Klesse		
11:30 - 11:42	Martin Šenfeldr	Variable climate-growth relationships of quaking aspen ( <i>Populus tremuloides</i> ) among Sky Island mountain ranges in the Great Basin, Nevada, USA ( <b>O7</b> ; <b>professional</b> )

11:42 – 11:54	Karen Uribe	Relationship between climate factors and tree growth of <i>Tachigali colombiana</i> in an ever-wet tropical forest ( <b>O8</b> ; student)
11:54 - 12:06	Ricardo Tejada-Arango	Phenology and multitemporal tree growth of Spanish elm Cordia alliodora from tropical Andes ( <b>O9; student</b> )
12:06 - 12:18	Ernesto J. Reiter	From stable slow-grown to vulnerable fast-growing: the divergent pathway of north Patagonian tree species under climate change ( <b>O10; student</b> )
12:18 - 12:30	Isabella Aguilera-Betti	Growth patterns of the southernmost conifer, <i>Pilgerodendron uviferum</i> , in Patagonia ( <b>O11; student</b> )
12:30 - 12:42	Jan Tumajer	Using the VS-Lite model to understand an interplay between the extension of growing season and increasing summer drought stress toward the end of the 21st century ( <b>O12; professional</b> )
12:42 - 13:00		Summary and discussion
13:00 - 14:30		Lunch break
Developments in Dendro Methods		
	Session chairs:	Neil Loader & Martin Häusser
14:30 - 14:42	Martin Häusser	A Novel approach to date intra-annual tree-ring isotopes (O13; professional)
14:42 – 14:54	Krešimir Begović	Scratching the surface" of the novel reflected-light QWA methodological approach ( <b>O14; professional</b> )
14:54 - 15:06	Elina Sahlstedt	A novel method for analyzing $\delta^{18}$ O by laser ablation IRMS ( <b>O15</b> ; <b>professional</b> )
15:06 - 15:18	Tito Arosio	Potential and limitations of different tree-ring stable isotope chronology development techniques ( <b>O16; professional</b> )
15:18 - 15:30	Stefan KlesseReclaiming data integrity compromised by cell wall degradation in multi- millennial MXD data using tree-ring anatomy ( <b>O17; professional</b> )	
15:30 - 15:42	Elisabetta Dixon	The importance of maintaining uncertainty: a Bayesian approach to constraining error and variation in chronology building ( <b>O18; student</b> )
15:42 - 16:00		Summary and discussion
16:00		Group photo
16:15 - 18:00	<b>Coffee break &amp;</b> <b>POSTER SESSION</b> (for the complete list of posters, see the last page of the programme)	
18:00 - 19:00	ATR MEETING	

#### THURSDAY, 06 OF JUNE 2024

#### **CONFERENCE VENUE**: Aula Sergiu Chiriacescu

ADDRESS: 41 A Iuliu Maniu Street, Brasov, 500091 (see the *TRACE2024\_Brasov\_Locations* document)

08.30 00.00	EXEMPLO KEYNOTE SPEAKER: Katarina Čufar Long reference chronologies and chronology networks – why do we need them?		
08.50 - 07.00			
		Wood Anatomy	
	Session chairs:	Eunice Romero & Peter Prislan	
09:00 - 09:12	Giovanni Bicego	A simple experiment designed to challenge the idea that xylem characteristics are determined by cambial age ( <b>O19; student</b> )	
09:12 - 09:24	Danyang Yuan	Radial growth and xylem adjustment of Mongolia oak to recent warming in the dry and wet areas of northeast China ( <b>O20</b> ; student)	
09:24 - 09:36	Ismael J. Borreguero	Reduced precipitation alters xylogenesis of two Mediterranean oak species ( <b>O21; professional</b> )	
09:36 - 09:48	Antonia Kölzer	Assessing European beech responses to climate variability and ecological disturbances using Quantitative Wood Anatomy ( <b>O22</b> ; student)	
09:48 - 10:00	Marek Fajstavr	Cell-wall Matters! Sap Flow as an Explanatory Power Indicating How Trees Allocate Carbon into Cell-walls in Temporal Resolution ( <b>O23; professional</b> )	
10:00 - 10:12	Silvia Piccinelli	Xylem traits of peatland Scots pine reveal complex intra-seasonal hydro- climate signals ( <b>O24; professional</b> )	
10:12 - 10:30		Summary and discussion	
10:30 - 11:00		Coffee break	
	Stable Isotope Applications		
	Session chairs: Va	alentina Vitali & Montana Puscas	
11:00 - 11:12	Andrew P. Weitz	Stable isotopes reveal contrasting physiological responses to climate change in Great Basin bristlecone pine ( <i>Pinus longaeva</i> ) ( <b>O25; professional</b> )	
11:12 – 11:24	Jerzy Piotr Kabala	Climate change signals in two low elevation Fagus sylvatica L. forests in southern Italy ( <b>O26; student</b> )	

11:24 – 11:36	Pavel Mezei	Impact of climate and insect outbreaks on isotope ratios in Norway spruce trees in the Western Tatra Mts., Slovakia (Central Europe) ( <b>027</b> ; <b>professional</b> )	
11:36 - 11:48	Sugam Aryal	Tree-ring oxygen isotope variations of two Himalayan pine species under the influence of regional drought ( <b>O28; student</b> )	
11:48 - 12:00	Valentina Vitali	Assessing forest acclimation dynamics: insights from a tree-ring multi-proxy approach ( <b>O29; professional</b> )	
12:00 - 12:12	Katja T. Rinne-Garmston	Drivers of intra-seasonal $\delta 13C$ signal in tree-rings of <i>Pinus sylvestris</i> as indicated by compound-specific and laser ablation isotope analysis ( <b>O30</b> ; <b>professional</b> )	
12:12 - 12:30		Summary and discussion	
12:30 - 14:00		Lunch break	
	Mis	scellaneous Dendroecology	
	Session chairs: Guill	ermo Gea-Izquierdo & Dario Martin-Benito	
14:00 - 14:12	Jitang Li	Phylogeny and climate explain drought resistance and resilience in arid regions ( <b>O31; student</b> )	
14:12 – 14:24	Evrim A. Şahan	Advancing Forest Carbon Flux Estimation through Fusion of Tree-Ring and National Forest Inventory Data ( <b>O32</b> ; <b>professional</b> )	
14:24 - 14:36	Marta Pardos	Marta Pardos Carbon storage potentiality of old-growth forests under climate warming (O33; professional)	
14:36 - 14:48	Jakub Kašpar	Major tree species of Central European forests differ in their proportion of positive, negative and non-stationary growth trends ( <b>O34; professional</b> )	
14:48 - 15:00	Soham Basu	Ecological responses of pedunculate oak and narrow-leaved ash to varying groundwater levels in a South Moravian floodplain forest ( <b>O35; student</b> )	
15:00 - 15:18	Summary and discussion		
16:00 – 18:00	OPTIONAL MID-TERM EXCURSION: Brasov city tour Meeting point: Livada Postei, in front of the rectorate of the Transilvania University of Brasov (Bulevardul Eroilor 31, Brașov 500036; see the TRACE2024_Brasov_Locations document)		
20:00 - 23:00	<b>CONFERENCE DINNER at HOTEL ARO PALACE</b> (Bulevardul Eroilor 27; see the TRACE2024_Brasov_Locations document)		

#### FRIDAY, 07 OF JUNE 2024

#### **CONFERENCE VENUE**: Aula Sergiu Chiriacescu

ADDRESS: 41 A Iuliu Maniu Street, Brasov, 500091 (see the *TRACE2024\_Brasov\_Locations* document)

08:30 - 09:00	<b>KEYNOTE SPEAKER: Jesús Julio Camarero Martínez</b>		
	Drought,	forest dieback and tree growth resilience	
Fo	rest ecosystems, human activ	vities, and climate change dynamics (first part)	
	Session chairs: R	oberta D'Andrea & Ania Cedro	
09:00 - 09:12	István Botár	Cultural heritage and dendrochronology in Transylvania (O36; professional)	
09:12 - 09:24	Johannes Edvardsson	New South Scandinavian Tree-Ring Records from Subfossil Oak and Pine as Proxies for Long-Term Climate Dynamics and Ecosystem Changes ( <b>037</b> ; <b>professional</b> )	
09:24 - 09:36	Kärt Erikson	Effect of water level change and weather on radial increment of Scots pine ( <i>Pinus sylvestris</i> L.) in Estonian peatland ecosystems ( <b>O38; student</b> )	
09:36 - 09:48	Mateusz Telążka	Tree ring record of spatial temporal arsenic pollution in old mining area in Sudetes Mountains (SW Poland) ( <b>O39; student</b> )	
09:48 - 10:00	Lena Vilà-Vilardell	Does prescribed burning increase the resistance of pine species to drought and bark beetles? ( <b>O40; student</b> )	
10:00 - 10:12	Daniela Robles	Modelling historical fire dynamics in Sweden: Integrating anthropogenic and climatic predictors ( <b>O41; student</b> )	
10:12 - 10:30		Summary and discussion	
10:30 - 11:00	Coffee break		
Fore	est ecosystems, human activi	ties, and climate change dynamics (second part)	
Session chairs: Roberta D'Andrea & Ania Cedro			
11:00 - 11:12	Patrick Chiroiu	Treelines in the Southern Carpathians: a tree-ring based approach to evaluate the impact of climate change and human activities on trees and shrubs growing at the treeline ( <b>O42; professional</b> )	

11:12 – 11:24	Renata Feher	Dendrogeomorphic assessment of rockfall activity and its potential triggers in Outer Western Carpathians: a case study under structural escarpment ( <b>O43</b> ; <b>student</b> )	
11:24 - 11:36	Paolo Cherubini	Tree-dating of Stradivari's violins (O44; professional)	
11:36 - 11:48	Dario Martin-Benito	Low xylem conductivity and plasticity of Mediterranean conifers contribute to drought induce decline and mortality ( <b>O45; professional</b> )	
11:48 - 12:00	Francesco Niccoli	Continuous Monitoring Approach to Unveil the Link Between Tree Hydraulic Function and IADFs: A Study Case on Pinus pinaster Aiton Forest in Drought-prone Mediterranean Ecosystem ( <b>O46; professional</b> )	
12:00 - 12:12	Audrey Salerno	Evaluating Leaf Trait Variation and Cambial Growth in High Elevation Bristlecone Pine ( <i>Pinus longaeva</i> ) ( <b>O47; student</b> )	
12:12 - 12:30		Summary and discussion	
12:30 - 14:00		Lunch break	
	Functional DendroEcology Session chairs: Guillermo Gea-Izquierdo & Dario Martin-Benito		
14:00 - 14:12	Guillermo Gea-Izquierdo	Functional dendroecology: integrating ecophysiological processes and dendrochronological proxies ( <b>O48; professional</b> )	
14:12 – 14:24	Paulina F. Puchi	Integrating tree-ring anatomical traits and carbon fluxes to unravel carbon allocation using 3D-CMCC-FEM model ( <b>O49; professional</b> )	
14:24 - 14:36	Sophie A. Zwartsenberg	Rising CO <sub>2</sub> increases photosynthetic efficiency of tropical forest canopy trees at the centennial scale ( <b>O50; student</b> )	
14:36 - 14:48	Kelly Swarts	Memory in trees (and how to model it) (051; professional)	
14:48 – 15:00	Mélanie Saulnier	Growth patterns, climate sensitivity and resilience of silver fir trees ( <i>Abies alba</i> Mill.) differ along a gradient of time since the last harvest in the Central Pyrenees ( <b>O52; professional</b> )	
15:00 - 15:12	Eva Dafčik Močnik	Impact of climate change on radial growth of silver fir ( <i>Abies alba</i> Mill.) along the Dinaric Mountains in Croatia ( <b>O53; student</b> )	
15:12 - 15:30	Summary and discussion		
15:30 - 16:00		Coffee break	
Past Climate Reconstructions Session chairs: Achim Bräuning & Michal Bosela			

16:00 - 16:12	Rob Wilson	Significant volcanic cooling expressed in tree-ring summer temperature reconstruction from Northern Patagonia, Argentina ( <b>O54; professional</b> )
16:12 – 16:24	Lea Schneider	The East Atlantic/Western Russia Pattern: A 300-Year Climate Dynamics Reconstruction from Tree-Ring Analyses ( <b>O55</b> ; professional)
16:24 – 16:36	Miloš Rydval	Reflected-light quantitative wood anatomy temperature reconstruction from the Romanian Carpathians ( <b>O56; professional</b> )
16:36 - 16:48	Tatiana Bebchuk	<u><i>Taxus</i></u> ring width network from southern England reflects western European hydroclimate extremes over the past three centuries ( <b>O57; student</b> )
16:48 - 17:06		Summary and discussion
17:15	TRACE2024	4 - CLOSING & AWARDS CEREMONY

# SATURDAY, 08 OF JUNE 2024

Schedule	<b>OPTIONAL Excursion – for those that registered for them</b>	
08:00 - 17:00	Şinca virgin forest – contact person: Ion Catalin Petritan	
09:00 – 17:00	Bran castle – contact person: Ana-Maria Hereş	
The meeting points for the two excursions will be announced during the conference days.		

# **POSTER SESSION**

#### WEDNESDAY, 05 OF JUNE 2024

#### **CONFERENCE VENUE**: Aula Sergiu Chiriacescu

ADDRESS: 41 A Iuliu Maniu Street, Brasov, 500091 (see t	e the TRACE2024_Brasov_Locations document)
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First author's name & surname	Title of the poster	Order (professional / student)
Achim Bräuning	The dual isotope approach in tropical tree rings: how homogeneous is the relationship between carbon and oxygen isotopes?	P1 (professional)
Agata Buchwal	Trees and shrubs from northern Norway exhibit distinct Blue Rings in 1877 and 1902	P2 (professional)
Agnese Anta Liepiņa	Radial Growth Reference models: Evaluating Oak Growth Response to Removal of Adjacent Trees	P3 (student)
Alessia Bono	Exploring wood density as a proxy of carbon stock across northern hemisphere conifers in relation to global warming and tree age variability	P4 (student)
Alessio Giovannelli	Can acclimation strategies under drought and warming be explained by changes in cambium sugar metabolism?	P5 (professional)
Alma Piermattei	First Record of Blue Ring in a Dicotyledonous Angiosperm	P6 (professional)
Andrea Fabiánová	Three-dimensional distribution of mass movement signals in disturbed <i>Picea abies</i> (L.) Karst.	P7 (student)

Ángela Sánchez- Miranda	Anatomical Response of Cork Oak (Quercus suber L.) to Cork Stripping	P8 (professional)
Anna Cedro	A birch tree as witness in a murder and cannibalism case	P9 (professional)
Annette Debel	Tree-ring stable carbon isotopes indicate increased drought stress for conifers in southeast Germany over the past 50 years	P10 (student)
Anni Nurmisto	Comparing sampling strategies for quantifying adaption on tree growth on Norway Spruce	P11 (student)
Any Mary Petritan	Do past management legacies modulate climate-growth relationships?	P12 (professional)
Bency David Chinthala	Climate reconstruction and geohazard analysis using tree ring data from western Himalaya	P13 (student)
Candice C. Power	Willow recruitment patterns along an elevation gradient on Disko Island, Greenland	P14 (professional)
Catalin C. Roibu	Comparative analysis of beech and oak resilience and adaptation to past and present extreme climatic events	P15 (professional)
Charlotte Angove	Driving factors of seasonal trends in tree-ring cellulose $\delta^2 H$ in a boreal forest	P16 (professional)
Chenxi Xu	High-latitude tree-ring oxygen isotopes from Northwestern Russia record summer relative humidity	P17 (professional)
Ciara Greaves	Quantifying lignin in Scots pine blue rings	P18 (student)
Ciprian C. Stremțan	<b>δ</b> <sup>13</sup> C variations in creep affected <i>Picea abies</i> (Făgăraș Mountains, Romania) analysed via laser ablation IRMS	P19 (professional)
Colin McFadden	Building Robots with Robots	P20 (professional)
Cosmin Ilie Cuciurean	Heavy metal concentrations in growth rings of broad-leaved reflect changes in industrial pollution but depend on analysis type	P21 (student)
Daniela Maria Llanos- Campana	Stable carbon and oxygen isotope ratios in Norway spruce ( <i>Picea abies</i> (L.) Karst.) tree rings along an elevation gradient in the Rarău Mountains (Romania)	P22 (student)

Diāna Jansone	Introduced Pinus contorta provenances: insights into radial growth variability	P23 (student)
Dominik Polťák	The 2022 Heatwave and Drought Led to a Severe Tree Water Deficit but not to Consistent Growth Reduction of Silver Fir and European Beech in Primary Forests	P24 (student)
Elisabet Martínez- Sancho	Evolutionary drivers of phenotypic traits in two European tree species – evidence from common garden networks	P25 (professional)
Emeka Vitalis Nwonu	Tracheid Anatomy Reveals Temperature-Driven Structural Adaptations in Alpine Norway Spruce	P26 (student)
Enrico Tonelli	Tree-ring traits of a silver birch ( <i>Betula pendula</i> Roth) glacial relict population in Central Italy	P27 (professional)
Eunice Romero	Using blue intensity, CooRecorder and BIcounter to estimate whole cross section proportion of compression wood, latewood and earlywood in treeline seedlings	P28 (professional)
Fabio Natalini	Declining trends in long-term Pinus pinea L. growth forecasts in Southwestern Spain	P29 (professional)
Gheorghe Stefan	The influence of forest management on the radial growth of Norway spruce ( <i>Picea abies</i> L.) trees in the north of the Eastern Carpathians	P30 (student)
Henry Marichal	CS-TRD: A Cross Section Tree Ring Detection method	P31 (student)
Ionel Popa	The response of <i>Quercus robur</i> and <i>Quercus pedunculiflora</i> to climate in the forest-steppe area of southeastern Romania	P32 (professional)
Iqra Liyaqat	Integrating Dendrochronology and Isotopic analysis to evaluate prolonged drought effect on <i>Quercus ilex</i> L. forest	P33 (student)
Irena Sochová	Stable carbon isotopes of oak rings reflect a strong drought signal independently of elevation in eastern Slovakia	P34 (student)
Ivana Vašíčková	A half-millennium record of disturbance history in the Bohemian Forest	P35 (professional)

Jakub Kašpar	Exploring climate growth limitations of European beech and silver fir along the gradient of Carpathian arc.	P36 (professional)
Javier Vázquez-Piqué	Old and young <i>Pinus pinea</i> and <i>Pinus nigra</i> trees show a different response to drought events in a mediterranean environment	P37 (professional)
Jelena Lange	Quantitative wood anatomy suggests spatially diverse climatic controls on white spruce growth across the North American treeline ecotone	P38 (professional)
Jernej Jevšenak	Non-stationary climate-growth responses in trees: A global dendroecological perspective	P39 (professional)
Johannes Edvardsson	Old Wood in a New Light – A dendrochronological database	P40 (professional)
Jonathan M. Kormann	Intraspecific differences in wood anatomical traits of northern red oak ( <i>Quercus rubra</i> L.) provenances provide opportunities for forest management	P41 (student)
Jorge A. Giraldo	Annual tree rings in the ever-wet tropical forest of the Americas	P42 (professional)
Katarzyna Oblińska	Climate-Growth Relationship Analysis of Trees and Shrubs in the Sub-Arctic - Comparative Study from Øvre Pasvik, NE Norway	P43 (student)
Katrien Boonen	The effect of ring width on mercury concentration in conifer tree rings	P44 (student)
Kayleigh Letherbarrow	Elucidating the dynamics and drivers of the Scottish mid-Holocene pine-decline using subfossil <i>Pinus sylvestris</i> dendrochronology and peat palaeoecology	P45 (student)
Lisa Jourdain	A quantitative analysis of the effect of sample size on dendroecological signal in earlywood vessels of ring-porous species	P46 (student)
Louis Verschuren	A 242-year beech ( <i>Fagus sylvatica</i> L.) latewood density chronology as a proxy for summer temperature in Western Europe	P47 (student)
Lucie Polášková	Exploring Mining Subsidence: Insights from Dendrogeomorphic Analysis	P48 (student)
Lucrezia Unterholzner	Exploring the potential of assisted migration for European beech based on its wood anatomy	P49 (professional)

Luis Matías	Introducing the Power Borer: an automated sampling solution for efficient dendrochronological sampling	P50 (professional)
Marcel Kunz	Assessing temporal stability of temperature signals in NW North American density records	P51 (student)
Marian-Ionut Stirbu	Unprecedented warming captured by the first Carpathian summer temperature reconstruction using quantitative wood anatomy chronologies	P52 (student)
Marie Duerinck-Grévy	Oxygen and carbon isotope patterns in tree rings from vital and non-vital beech trees in the Valais, Switzerland	P53 (student)
Maris Hordo	Growth-climate response at different stem heights of larch trees in Estonia	P54 (professional)
Matej Ferenčík	Conservation of beta-diversity helps guard against the loss of multiple environmentally sensitive species in European primary forests	P55 (student)
Michal Bosela	Effects of drought and disturbance on the soil CO <sub>2</sub> and CH <sub>4</sub> fluxes and tree growth in a mixed forest and spruce monoculture	P56 (professional)
Mikael Moura	The impact of growth and climate on the resin production of <i>Pinus pinea</i> and <i>Pinus pinaster</i>	P57 (student)
Mirela Beloiu Schwenke	Early successional species show higher tolerance to drought across Europe than late successional species	P58 (professional)
Mohammad Hossein Mazaherifar	Tree-Ring Widths and Stable Isotope Records of Juniper Tree Rings as Climate Indicators in Hezar Masjed Mountain, Northeastern Iran	P59 (student)
Mohsen Arsalani	Ecological impacts of abrupt climate changes on oak dieback in the Zagros oak woodlands, Iran	P60 (professional)
Momchil Panayotov	Avalanche effect on <i>Pinus peuce</i> forests on the Northwestern slope of Todorka peak in Pirin Mountains	P61 (professional)

Na Li	Herbaceous encroachment altered the climatic sensitivity of the growth of <i>Rhododendron chrysanthum</i> in an alpine tundra	P62 (student)
Negar Rezaie	Are there any discrepancies between root and stem intra annual growth?	P63 (professional)
Nikolaus Obojes	Quantifying drought impact on conifer growth using dendrometer and sap flow data	P64 (professional)
Oleksandr Sylenko	Site conditions drive Quercus robur climatic sensitivity in urban forests	P65 (student)
Osvaldo Pericolo	Dendro-ecological traits as predictive indicators of oak decline	P66 (professional)
Paweł Matulewski	Exploring Peatland Dynamics: Dendrochronological and Palaeoecological Insights into Climate Change and Forestry Impacts	P67 (professional)
Peter Marcis	Growth Responses of Temperate Forest Tree Species to Climatic Extremes in the Western Carpathians: A Comparative Analysis of Primary and Managed Forests	P68 (student)
Peter Prislan	Tree-ring widths and quantitative wood anatomy in beech trees from common garden experiments in Slovenia and Hungary	P69 (professional)
Petter Stridbeck	A Millennium-Long Hydroclimate Reconstruction for a Northern Swedish Site	P70 (student)
Rob Wilson	Enhanced crossdating using multi-tree-ring parameters	P71 (professional)
Roberta D'Andrea	Insights from living trees: dendroecology as a tool to investigate timber exploitation and management throughout medieval and modern Occitania (France)	P72 (professional)
Roberts Matisons	Are weather-growth relationships heritable?	P73 (professional)
Rory Abernethy	Exploring the climatic responses of several Australasian conifer species and elucidating evidence for volcanic responses through a novel image capture system	P74 (professional)
Sajad Sajad	The response of Norway spruce intra-seasonal chronologies to weather variability depicts the impact of extreme drought on growth reduction in 2022 in the Western Carpathians	P75 (student)

Viktória Pipíšková	Is the Effect of Drought on Stem Radial Increment Less Intense in Spruce-Larch-Beech Mixed Stands than in Monocultures?	P76 (student)
Wenling An	Enhanced Land-Atmosphere coupling has caused strong climate signal in tree-ring oxygen record—a case study from Serbia	P77 (professional)
Yulia Prokopuk	Growth-limiting climatic factors of historic Sorbus torminalis trees in Kyiv, Ukraine	P78 (professional)
Zeynab Foroozan	Growing Through Dry Spells: Unveiling Tolerance Thresholds in Broadleaved and Coniferous Tree Species During Soil Water Scarcity	P79 (professional)
Rob Wilson	Applied Examples of "MultiXdateR	P80 (professional)