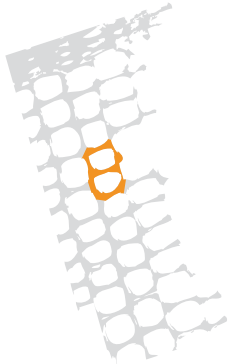
Tree-Ring Science under the Midnight Sun, *University of Lapland, Rovaniemi, Finland*



Fieldweek, June 6. – 12, 2010, *Mekrijärvi, North Karelia*

A – Fellman hall
B – Lecture hall LS 3
C – Lecture hall LS 2
D – Castren hall

Sunday, June 13, 2010, *Arktikum, Rovaniemi*

15:00–(18:00) Registration, visit to Arktikum exhibitions: The Arctic in Change (Arctic Centre), Northern ways (The Provincial Museum of Lapland)

18:00–20:00 Icebreaker

Monday, June 14, 2010

08:00–09:00	Registration	
09:00–09:30	*Edit Impiö & Iida Impiö*	Music; Järnefelt & Sibelius
	Prof. Pasi Puttonen,	Opening of the conference
	Dr. Harri Mäkinen	Technical announcements
09:30–10:00	*Prof. Kari Mielikäinen*	Dendrochronology in Finland: Historical milestones and current activities
10:00–10:30	*Prof. Juha-Pekka Lunkka*	Climate history of Eurasia; from greenhouses to Ice Ages
10:30–11:00	*Coffee break*	
11:00–11:30	*Prof. Peter M. Brown*	State of dendrochronology; Introspective science from retrospective records
11:30–12:00	*Prof. Heinrich Spiecker*	Climate change and management of forest ecosystems
12:00–13:30	*Lunch*	

	A.1 Divergence phenomenon Session chair: *Achim Bräuning*	B.1 New techniques and statistical approaches Session chair: *Samuli Helama* Co-chair: *Kevin T. Smith*	C.1 Treeline and northern tree rings Session chair: *Michael Grabner*	D.1 Dendroarchaeology Session chair: *Kristof Haneca* Co-chair: *Tomasz Wazny*
13:30–14:00	**1** The Challenges Posed by "Divergence", *K. Briffa*	**1** Singular spectrum analysis as a tool to identify dendroclimatic relationships in *Acer saccharum*, *Betula alleghaniensis*, and *Picea rubens* in the northeastern United States, *K. T. Smith*	**1** A Tale of 10,000 trees – The Northwestern North American Tree Ring Synthesis, *M. Wilmking*	**1** Trade, earthquakes and tsunami – tree-ring study on Yenikapi harbor in Istanbul, *T. Wazny*
14:00–14:20	**2** Are temperature reconstructions from northern treeline still possible? *M. Pisaric*	**8** DIRECT: a new approach to dendroclimatic reconstructions, *V. Matskovsky*	**2** Linking cambial phenology with climate growth analysis to understand how climate influences tracheid production in *Picea mariana, B. Dufour*	**2** Differentiation of wood provenances of Norway spruce and Silver fir in Southern Germany by dendroecological and statistical methods, *C. Dittmar*
14:20–14:40	**3** Forest fire and stand dynamics in West Khentey Mountains, Mongolia *O. Byambamurem*	**3** Application of Monte-Carlo methods to estimate the significance of paleoclimatic and dendroclimatic calibration-verification statistics from autocorrelated time-series, *M. M. Fauria*	**3** The peculiarities of larch growth in the northern timberline, *A. Shashkin*	**3** Lessons Learned from Irish Dendrochronology, *D. Brown*
14:40–15:00	**4** Nonlinear growth responses of Douglas-fir in the Pacific Northwest to summer temperatures in the past decade, *E. H. Lee*	**4** Process based standardisation and a comparison with a tree-growth model, *T. Melvin*	**4** Potential target season-changes for different sub-arctic tree-species from 1913–2009, *J. Björklund*	**4** Filling in the blanks in European dendrochronology: building a multidisciplinary research network to assess Iberian wooden cultural heritage worldwide, *M. Domínguez Delmás*
15:00–15:30	*Coffee break*			
15:30–15:50	**5** A circa 9,000-year summer temperature reconstruction for the Eastern Alps: data, challenges and preliminary results, *K. Nicolussi*	**5** It's all in the mix – Dendroecological archetypes provide a new perspective on inherent growth patterns, *C. Zang*	**5** Tree-line dynamics, radial growth of timberline trees and alpine shrubs on the southeastern Tibetan Plateau, *E. Liang*	**5** Dendrochronological investigations of medieval and post-medieval buildings in south-west England, *M. Hurford*
15:50–16:10	**6** Assessing "divergence" in Swedish tree rings using data from the National Forest Inventory, *H. Grudd*	**6** A new approach to select the best trees for dendroclimatic analyses, *M. Carrer*	**6** Spruce growth and climate sensitivity along glacial rivers of Alaska, *G. Juday*	**6** Results of Research into Subfossil Oak Trunks from the Morava Basin, *T. Kolar*
16:10–16:30	**7** A mid-20th century shift of Scots pine climate-response in North Norway, *A. J Kirchhefer*	**7** RCS modelling problemacy, *M. Timonen*	**7** Environmental drivers and spruce growth along elevation gradient in Finnish Lapland, *R. Sutinen*	**11** Identification of Iranian archeological woods by vessel shape, *V. Safdari*
16:30–18:00	Poster session I, we ask the authors of the posters PA1–PA2, PB1–PB2, PC1–PC2, PD1–PD2 to be at their posters.			
17:00–18:00	R demo / Franco Biondi, LS 9			

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Tuesday, June 15, 2010

	A.2 Reconstruction of past climate variations Session chair: *Frank Berninger* Co-chair: *Kerstin Treydte*	B.2 Tree rings and natural hazards Session chair: *Markus Stoffel* Co-chair: *Brian Luckman*	C.2 Wood anatomy Session chair: *Patrick Fonti*	D.1 Dendroarchaeology, continues Session chair: *Kristof Haneca* Co-chair: *Tomasz Wazny*
09:00–09:30	**1** Climate reconstruction from tree-rings: Advances, Developments, Challenges, *K. Treydte*	**1** Dendrochronology in natural hazards research, *B. Luckman*	**1** Wood anatomy and different data to study the environmental signals registered in tree-rings – overview and example of beech (*Fagus sylvatica*), *K. Cufar*	**8** (-10 min) Medieval roof constructions in Flanders: built with local timber or not? *K. Haneca*
09:30–09:50	**2** Combining tree-ring proxies and model simulations to reconstruct European climate, *J. Franke*	**2** Magnitude-frequency relationships of debris flows – a case study based on field surveys and tree-ring records, *M. Stoffel*	**2** Effect of experimental flooding on vessel area of pedunculate oak and common ash – a matter of timing, *U. Sass-Klaassen*	**9** Reconstructing Al-Aqsa: dendrochronological analysis and absolute dating of timbers from Jerusalem's most sacred mosque, *B. Lorentzen*
09:50–10:10	**3** Pan-European climate signals in population dynamics of subfossil oak and pine trees from mire lowlands, rivers and lakes, *H. H. Leuschner*	**3** Tree-ring reconstruction of past lahar activity at Popocatépetl volcano, Mexico, *M. Bollschweiler*	**3** Maximum latewood density derived from wood anatomical time series analysis, *H. Gärtner*	**10** Timber trade in the Baltic area during the 13th century, *S. Wrobel*
10:10–10:30	**4** Scandinavian temperature swings offset global warming, *U. Büntgen*	**4** Dendrochronological reconstruction of snow avalanche activity in the southern Wasatch Mountains, Utah, USA, *M. Bekker*	**4** Twenty years of Needle Trace Method, NTM, *R. Jalkanen*	**7** Prehistoric dating of the salt mine Hallstatt – Austria: A problem of inter-species synchronisation, *M. Grabner*
10:30–11:00	*Coffee break*			
				D.2 Hydroclimatic changes Session chair: *Ute Sass-Klaassen* Co-chair: *Jaques Tardif*
11:00–11:20	**5** 1200 years of summer temperatures from height increment of Scots pine at the northern timberline in Fennoscandia, *M. Lindholm*	**5** Recent snow-avalanche activity determined by dendromorphology and dendrochronology in Northern and Northwestern Iceland, *A. Decaulne*	**5** Intra-annual variation of cell parameters of Scots pine and its association with climate throughout Finland, *J.-W. Seo*	**1** (+10 min) Spring water levels reconstructed from ice-scarred trees and cross-sectional area of the earlywood vessels in tree-rings from eastern boreal Canada, *J. Tardif*
11:20–11:40	**6** A 3500 years-long density chronology in Dachstein mountains, Austria – preliminary results, *M. Klusek*	**6** Separating debris-flow and snow avalanche events in a steep watershed of the Swiss Alps using injured broad-leaved and conifer trees, *S. Szymczak*	**6** Wood anatomy and microcharcoal used as markers of paleoenvironmental reconstruction and indicators of prehistoric fire regimes. The case of the Ambato valley at the end of the 1st Millennium, *H. B. Lindskoug*	**2** An Ensemble-Based Approach To Reconstructing Gridded Drought From Tree Rings Over Monsoon Asia, *E. Cook*
11:40–12:00	**7** Reconstruction of extremely short or cold summers in the Siberian Subarctic over the last 500 years – the story of anomalous tree ring structures, *M. Gurskaya*	**7** Frequency and spread of hyperconcentrated flows on fans: a dendrogeomorphic case-study from a dolomite catchment in the Austrian Alps, *B. Mayer*	**7** Evaluation of water deficit tolerance of young aspen (*Populus tremula* L.) using wood characteristics of juvenile tree rings, *M. Meyer*	**3** A 1000+ year summer PDSI reconstruction for southern-central England, *R. Wilson*
12:00–12:20	**8** Floating millenial chronologies of *Pinus* in the Sierra de Gredos (Spain), *M. Génova*	**8** Reconstruction of debris-flow activity in the Mont Dore Valley, Sancy Massif (French Central Massif), *O. Traian Pop*	**8** Erosional processes in the upper part of the mountain catchments recorded in exposed roots, *D. Wrońska-Wałach*	**4** Dendrohydrology: a tool for decision making in the face of climate uncertainty, *C. Woodhouse*
12:20–13:50	*Lunch*			
	A.2 continues	B.2 continues	C.2 continues	D.2 continues
13:50–14:10	**9** A multiproxy assessment of the growth response to climatic variability of old living trees in the Pyrenees, *J. J. Camarero*	**9** An improved statistical method in dendrogeomorphology: case study from snow avalanches in the Chic-Chocs Range, eastern Canada, *D. Germain*	**9** Wood anatomical analysis of broad-leaved trees injured by debris-flow events, *E. Arbellay*	**5** A Central European oak network reveals inter-annual to multi-centennial hydroclimatic variability over the past 2500 years, *W. Tegel*
14:10–14:30	**10** Climate and streamflow variability in the sub-Antarctic region of South America (45º – 56º S) during the last 500 years: integrating tree-rings, instrumental records and hydro-climatic modeling., *A. Lara*	**10** Use of resistograph for dendrogeomorphological analysis of avalanche impacts, *J. Lopez Saez*	**10** Investigating relationships between ring width, density and cell properties for two long-lived Southern Hemisphere conifers, *K. Allen*	**6** Reconstructions of regional scale hydroclimatic variability in California using a network of high-quality blue oak (Quercus douglasii) tree-ring chronologies, *D. Griffin*
14:30–14:50	**11** Holocenic glacial fluctuations at the Mount San Lorenzo, Aysen Chile, *J.-C. Aravena*	**11** Spatial reconstructions of snow avalanche frequency and extent using tree rings in Parc National des Ecrins, French Alps, *C. Corona*	**11** Tree rings used to assess effects of gypsy moth (*Lymantria dispar* L.) defoliation on wood volume growth of oaks (*Quercus* spp.) in Pennsylvania, USA, *M. A. Fajvan*	**7** Applying the tree-ring record to critical problems in water resource management, *S. Gray*
14:50–15:10	**12** Spatial drought variability over Northwest China inferred from tree rings, *K. Fang*	**13** Snow avalanche records in the central Pyrenees, *E. Muntán*	**12** The ecological success of the mangrove Avicennia: the perfect combination of well-adapted wood anatomical characteristics and special radial growth? *E. Robert*	**8** Development of south Swedish bog-pine chronologies – assessment of palaeoclimatic potential on local to regional scale, *J. Edvardsson*
15:10–15:40	Coffee break			

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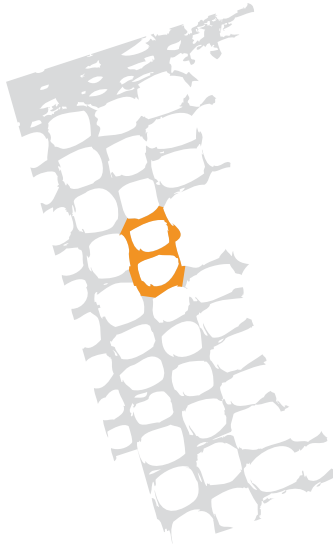
Tuesday, June 15, 2010, continues

	A.2 Reconstruction of past climate variations Session chair: *Frank Berninger* Co-chair: *Kerstin Treydte*	B.2 Tree rings and natural hazards Session chair: *Markus Stoffel* Co-chair: *Brian Luckman*	C.2 Wood anatomy Session chair: *Patrick Fonti*	D.2 Hydroclimatic changes Session chair: *Ute Sass-Klaassen* Co-chair: *Jaques Tardif*
15:10–15:40	Coffee break			
15:40–16:00	**13** Annual temperatures during the last 2485 years in the mid-eastern Tibetan Plateau inferred from tree rings, *Y. Liu*	**14** Dendroecological study of disturbances in the natural Picea abies forest "Paranglitsa" in Bulgaria, *M. Panayotov*	**13** Microstructure and chemical composition of tree-rings: new opportunities for multiparameter analysis, *P. Silkin*	**9** Multi-century tree-ring reconstruction of annual streamflow for the Maule watershed, South-Central Chile, *R. Urrutia*
16:00–16:20	**14** The New Zealand kauri chronology: recent advancements in updating and improving the record, *G. Boswijk*	**15** Dendrochronological study in the Terekhol Basin, Southern Siberia, Russia, *E. Kuznetsova*	**14** Impact of three silvicultural regimes on radial growth and wood quality of black spruce, a study case in the boreal forest, *É. Pamerleau-Couture*	**10** A tree-ring perspective on recent and future Rocky Mountain runoff, *D. Sauchyn*
16:20–16:40	**15** Following the flow: recent progress towards a multi-centennial reconstruction from Eucalyptus pauciflora, *M. Brookhouse*	**16** External factors influence on tree growth at the northern timberline at Kola Peninsula and Northern Lapland, *E. Kasatkina*	**15** Spatio-temporal variation of earlywood vessel features of Quercus robur L. along a climatic gradient in the Northwestern Iberian Peninsula, *I. García-González*	**11** The hydroclimatic signal in tree-ring chronologies and recent streamflow trends in the western boreal region, Canada, *J.-M. St. Jacques*
16:40–17:00	**16** 500 years of *Pinus heldreichii* growth variability for the Pirin Mountains in Bulgaria, *M. Panayotov*	**B 4.3** Testing the pyroclimatic hypothesis for Mt.Irish, Nevada, USA, *F. Biondi*	**16** Disturbance history of mountain spruce forests in the Carpathian Mts. derived from tree-rings, *T. Zielonka*	**12** Spring flood reconstruction from ice scar chronologies: the example of lake Montausier, northeastern Canada, *E. Boucher*
19:00-20:30	Rovaniemi City Reception			

Wednesday, June 16, 2010

	A.3 Tree rings and insects, diseases and anthropogenic factors Session chair: *Risto Jalkanen*	B.1 New techniques and statistical approaches Session chair: *Samuli Helama* Co-chair: *Kevin T. Smith*	C.3 Dendroecology of shrubs Session chair: *Eryuan Liang*
09:00–09:30	**1** Spruce budworm outbreaks and the dynamics of boreal old growth forest of Eastern North America, *H. Morin*	**2** continues (-10 min) A digital collaboratory for cultural dendrochronology (DCCD) in the Low Countries, *E. Jansma*	**1** Ecological significance of annual rings in trees, shrubs and herbs, *F. Schweingruber*
09:30–09:50	**2** Testing for a CO_2 fertilization effect on growth of Canadian boreal forests, *M. Girardin*	**9** Use of mixed models in dendroecology, *F. Berninger*	**2** Scaling the mountains and roaming the tundra – expanding shrubs in North-Scandinavia and Northwest-America, *M. Hallinger*
09:50–10:10	**3** Coring as a contributing factor to tree mortality?, *J. Wunder*	**10** Analysis of non-linear relationships between climate and tree rings using non metric multidimensional scaling, *D. Patón*	**3** Deciduous shrub growth and the greening of the Arctic in Western Siberia, *B. C. Forbes*
10:10–10:30	**4** Silver fir (*Abies alba* Mill.) decline and dieback: comparison of growth patterns between sites and improvement of tree mortality models, *M. Cailleret*	**11** Dendroclimatic instability in Aleppo pine across the Mediterranean basin, *M. de Luis*	**4** Annual shoot length growth of the Arctic dwarf shrub Cassiope tetragona as monitor of present-day and past climate change, *S. Weijers*
10:30–11:00	*Coffee break*		
11:00–11:20	**5** The contribution of the root system to the success of sylvicultural treatments, *C. Krause*	**12** The interior of tree roots – a fusion of 3D laser scanning and 2D tree ring data, *B. Wagner*	**5** Comparison of tree ring patterns of dwarf shrubs and trees of the genus Betula at the upper timberline in Norway, *I. Burchardt*
11:20–11:40	**6** Changes in growth and dendroclimatic response of trees growing along an artificial lake, *C. Copenheaver*	**13** Defining temperature and soil moisture tresholds for positive radial increment of cork oak (*Quercus suber* L.) in a mediterranean environment: an approach based on generalized semiparametric linear mixed models, *J. Vázquez-Piqué*	**6** Are shrubs climbing mountains faster in warmer microclimates? *I. H. Myers-Smith*
11:40–12:00	**7** Air pollution recorded in Scots pine and disease rises in local population due to harmful emissions in Upper Silesia (southern Poland), *I. Malik*	**14** Does acorn production influence the diametric stem growth of holm oak? *D. Martin*	**7** Interaction of geomorphic features and dendrochronological potential of polar dwarf shrubs (Salix polaris, Svalbard), *A. Buchwal*
12:00–12:20	**8** Dendroclimatological analysis of declining Norway spruce forests (*Picea abies* (L.) Karst) in West Carpatians, *R. Marusak*	**15** Analyzing subjective expert opinions about standardization of tree-ring series, *J. Hollmen*	**8** Advances of shrub in dendrochronology study in China, *X. Shengchun*
12:20–13:50	*Lunch*		
13:50–20:00	In-conference tour		



A – Fellman hall
B – Lecture hall LS 3
C – Lecture hall LS 2
D – Castren hall

Tree-Ring Science under the Midnight Sun, *University of Lapland, Rovaniemi, Finland*

Thursday, June 17, 2010

	A.4 Climate-growth relationship of different tree species Session chair: *Jan Esper* Co-chair: *David Frank*	B.3 Stable isotopes Session chair: *Gerd Helle* Co-chair: *Akira Kagawa*	C.4 Intra-annual cambium dynamics Session chair: *Annie Deslauriers* Co-chair: *Jožica Gričar*	D.3 Stand dynamics and sustainable forest management Session chair: *Pascale Weber* Co-chair: *Christof Bigler*
09:00–09:30	**1** Qinghai-Tibetan Plateau tree-ring network reveals large-scale spring moisture variation, *Q.-B. Zhang*	**1** Stable isotopes of tree rings as a tool to pinpoint the geographic origin of timber, *A. Kagawa*	**1** Application of controlled experiments for studies of radial growth of trees, *J. Gricar*	**1** Use and misuse of tree rings in long-term forestecosystem research: Swiss experiences, *P. Cherubini*
09:30–09:50	**2** Summer temperature reconstruction for SE European Alps based on European larch (*Larix decidua* Mill.) treering proxies, *T. Levanic*	**2** Laser microdissection-flash-pyrolysis-GC-IRMS: a new method for rapid analysis of intra-and interannual variations of ^{13}C and ^{18}O in tree rings, *G. Helle*	**2** Intra-annual cambial activity and carbon availabilty in stem of poplar, *A. Deslauriers*	**2** Climate impacts on tree growth, mortality and lifespan of conifers in forests of the European Alps and the Rocky Mountains, *C. Bigler*
09:50–10:10	**3** Assessment of long-term interannual tree NPP varia tions in response to climate, *F. Babst*	**3** The influence of atmospheric circulation patterns on the oxygen isotope ratio in precipitation and tree rings, *M. Saurer*	**3** Predicting timings of xylogenesis in black spruce under climatic warming, *S. Rossi*	**3** Growth and sensitivity of beech at the dry distribu tion limit, *P. Weber*
10:10–10:30	**4** Climate and stand dynamics in the *Pinus pinaster* forest stands in northern Portugal, *M. L. R. Liberato*	**4** Biases and trends in long-term isotope data from the Spanish Pyrenees, *J. Esper*	**4** Intra-annual radial growth in Scots pine (*Pinus sylvestris* L.) exposed to drought, *W. Oberhuber*	**4** Tree response to severe drought in the Republic of Ireland: the case of Avoca, Co. Wicklow, *A. Tene*
10:30–11:00	*Coffee break*			
11:00–11:20	**5** The value of *Pinus heldreichii* as climate archive in Southeastern Europe, *K. Grunewald*	**5** Stable C and O isotopes in tree physiology for the interpretation of tree ring data, *R. Siegwolf*	**5** Temperature-induced differences in timing of intra-annual growth of subalpine Larix decidua and Picea abies, *P. Fonti*	**5** Spatial and age structure, tree-ring growth dynamics and climate sensitivity in treeline beech forests in Central Italy, *C. Urbinati*
11:20–11:40	**6** Climate impact on the radial increment of Norway spruce (*Picea abies* (L.) Karst.) in Belarus, *M. Yermokhin*	**6** A Millennial length Stable Isotope Chronology for Arctic Sweden (Torneträsk), *N.J. Loader*	**6** Circadian stem size dynamics in larch and spruce along a 900-meter elevational gradient, *G. M. King*	**6** Climate signal and sensitivity of Turkey oak (*Quercus cerris*) in central-southern Italy, *V. Gallucci*
11:40–12:00	**7** The first quantative warm period temperature reconstruction in the Caucasus mountains derived from tree-ring data, *E. Dolgova*	**7** Reconstructing the climate of Scotland using stable carbon and oxygen isotopes in *Pinus sylvestris* L. (Scots pine), *E. Woodley*	**7** What a dendrochronologist can learn from cambium phenology and intra-annual dynamics of tree-ring formation? *C. Rathgeber*	**7** Norwey spruce of different provenances grown in dry regions of Austria – influences on ring width and wood density, *S. Karanitsch-Ackerl*
12:00–12:20	**8** Opposite migration of beech and spruce in Southern Sweden – A dendroclimatological analysis, *B. Grundmann*	**8** Age related growth trends in the tree-ring archive: A case study from Pinus sylvestris L. in north-western Norway, *G. Young*	**8** Seasonal growth of tree-rings in larch (*Larix gmelinii* Rupr.) on permafrost soils in Siberia, *M. Bryukhanova*	**8** Comparison in radial growth patterns of Picea abies in Bulgarian and Swiss mountains, *F. Krumm*
12:20–13:50	*Lunch*			
	A.4 continues	B.3 continues	C.4 continues	D.3 continues
13:50–14:10	**9** A preliminary analysis of regional moisture in the Northwestern China during the past 150 years, *Y. Zhang*	**9** Long-Term Changes in Water Use Efficiency Across Europe, *D. Frank*	**9** Phloem ring formation and secondary changes in beech (*Fagus sylvatica*) bark, *P. Prislan*	**9** Studying the effect of seasonal temperature and precipitation on annual diameter growth of Scots pine on drained peatlands, *H. Hökkä*
14:10–14:30	**10** Tree-ring-based reconstruction of the April to September mean temperature since 1826 AD for north-central Shaanxi Province, China, *Q. Cai*	**10** Climate signals in stable isotopes of *Juniperus excelsa* from Turkey back to 1025, *I. Heinrich*	**10** Re-activation of xylem and phloem flow in young oaks during spring, *P. Copin*	**10** Effects on dry matter production and intra-annual growth ring density characteristics of genetically improved Norway spruce in northern Sweden, *T. Mörling*
14:30–14:50	**11** Responsive variations of *Qilian Juniper* to climate at different elevations in Wulan, Qinghai Province, China, *Y. Xu*	**11** The use of carbon and oxygen stable isotope data in tree-rings for dendroecological studies in Siberia (Russia), *A. V. Kirdyanov*	**11** Xylem formation and seasonal growth of Agathis aus tralis (kauri) – an examination of intra-annual tree-ring patterns, *S. P. J. McCloskey*	**11** Dynamics of Pinus banksiana mortality in the eastern Canadian boreal forest, *A. Genries*
14:50–15:10	**12** Tree-ring based winter temperature reconstruction for the lower reaches of the Yangtze River in southeast China, *J. Shi*	**12** Stable isotopes in tree rings as indicator of climatic and environmental changes in high – latitude and -altitude regions, *O. Sidorova*	**12** Compression wood formation as an indicator of ice storm damage in the southern Appalachian Mountains, USA, *B. Hook*	**12** Would *Quercus canariensis* Willd. populations from low elevations be particularly threatened by drought increase? *G. Gea-Izquierdo*
15:10–15:40	*Coffee break*			
15:40–16:00	**13** Three spruce chronologies of tree-ring maximum density from upper tree line in the western Tianshan Mountains of Xinjiang, *Y. Yujiang*	**13** Dendrochronology and metal deposition in tree rings of baldcypress (*Taxodium distichum*) growing in wetlands in south Louisiana, USA, *M. S. Devall*	**13** A physiological model of wood formation, *T. Hölttä*	**13** Interactive effects of climate and groundwater depth on semiarid woodlands: a dendrochronological analysis in central Argentina, *S. Marys Bogino*
16:00–16:20	**14** History of *Abies spectabilis* population recruitment along an altitudinal gradient in Mt. Everest region, *L. Lv*	**14** Reconstructing hydro-climate during the last two centuries in the northeastern Canadian boreal forest using carbon and oxygen dendroisotopes, *C. Bégin*		**14** *Nothofagus dombeyi* and *Austrocedrus chilensis* establishment in declining forests, *M. Amoroso*
16:20–16:40	**15** The palaeoclimatic potential of conifer species in the Himalayan region of Pakistan, *M. Ahmed*	**15** Evaluating the integrity of isotopic series in fossil wood deposited in Northeastern Canadian lakes – Preliminary work for reconstructing millennium climatic series, *M. M. Savard*		**15** Impact of future climate on radial growth of four dominant boreal tree species along a latitudinal gradi ent in the eastern Canadian boreal forest, *J.-G. Huang*
16:40–18:30	Poster session II, we ask the authors of the posters PA3–PA5, PB3–PB4, PC3–PC5, PD3–PD4 to be at their posters.			
17:00–17:30	Meeting of the Nordic Association			
17:30–18:30	Meetings of the continental associations (ATR, TRS, Asian, Nordic)			

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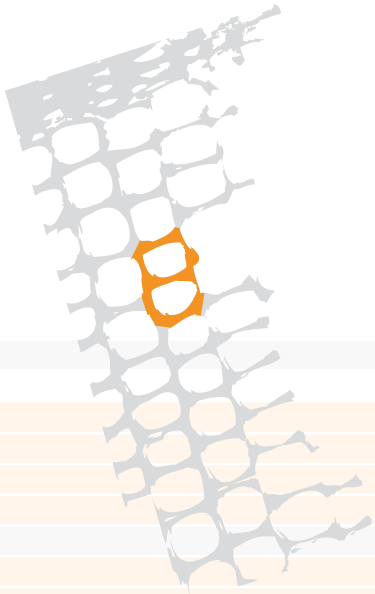
Friday, June 18, 2010

	A.5 Teleconnections Session chair: *Yu Liu*	B.3 Stable isotopes Session chair: *Gerd Helle*	C.5 Landscape dynamics Session chair: *Rob Wilson*	D.4 Tropical dendrochronology Session chair: *Fidel Roig*
09:00–09:30	**1** Teleconnections in the climate system from a dendrochronological perspective, *H. W Linderholm*	**16** (-10 min) A comparison of stable carbon and oxygen isotopes in tree rings and Sphagnum mosses from the Canadian Arctic, *S. Holzkämper*	**1** Rate of post-fire rise of permafrost under larch stands in Siberia estimated by dendrochronological methods, *A. Knorre*	**1** Long Montezuma Baldcypress tree-ring chronologies in Mesoamerica, *D. Stahle*
09:30–09:50	**2** Low frequency variation in tree-ring chronologies: evidence of the Pacific North American pattern (PNA) in the Southern Appalachian and Northern Rocky Mountains, USA, C. Crawfor	**17** Hydroclimate variations and δ18O of precipitation recorded by tree-ring cellulose δ18O of different tree species from different environment in semi-arid Northern China, *Q. Li*	**2** Tree-ring evidence of glacier dynamics in Monsoon Asia during the Late Holocene, *A. Bräuning*	**2** Plastic wood anatomical responses of tropical species to dry and moist conditions, *E. Fichtler*
09:50–10:10	**3** Climate/tree-ring and teleconnection relationships for a millennial-length chronology of Chamaecyparis obtusa var. formosana from northern Taiwan, *W. Wright*	**18** High-frequency signals in millennial stable isotope series from the Tibetan plateau, *J. Griessinger*	**3** Tree species portfolio in a drier future – a case study from Valais, *B. Eilmann*	**3** Dendrochronology and isotope chronology of Juglans neotropica and its response to ENSO events in tropical highland areas of Piura, northern Peru, *T. M. Ektvedt*
10:10–10:30	**4** Climate reconstruction from tree ring data of western Himalaya and its tele-connection with global sea surface temperature and sea level pressure, *A. Bhattacharyya*	**19** The potential of tree rings and stable isotopes from East to West Africa, *A. Gebrekirstos*	**4** Effects of high latitude climate change and permafrost dynamics on forest growth in the Mackenzie river basin in northern Canada, *T. Varem-Sanders*	**4** From darkness to light, evaluating the gap dependence of Bolivian rainforest tree species, *C. C. Soliz-Gamboa*
10:30–11:00	*Coffee break*			
		B.4 Forest fires in changing climate Session chair: *Connie Woodhouse*		
11:00–11:20	**5** Basis and application of superposed epoch analysis to fire/climate relationships, *E. K. Sutherland*	**1** (+10 min) Fire history of the Giant Forest, Sequoia National Park, *T. Swetnam*	**5** Historical fire regimes and stand development patterns in Australian Eucalypt forests – integrating tree-ring, pollen and charcoal analysis, *R. Simkin*	
11:20–11:40	**6** Expanding the tree-ring chronology network in SW Spain, *D. Patón*	**2** Fire-climate interactions in the American West since 1400 CE, *V. Trouet*	**6** Asymmetric variability between maximum and minimum temperature in Northeastern Tibetan Plateau: Evidence from tree rings, *X. Gou*	
11:40–12:00	**7** Changes in teleconnection pattern between Japanese summer monsoon (Baiu) and ENSO during last three centuries: Evidences from oxygen isotopic ratios of tree-ring cellulose in northern, central and southern Japan, *T. Nakatsuka*	**4** Fire activity in Scandinavia during 1500–1900, *M. Niklasson*	**7** Dendroclimatological analysis of summer temperatures in the Irik Valley, Elbrus Region (Russia), *I. H. Holobaca*	
12:00–12:20	**8** Annual Precipitation since A.D. 1460 reconstructed from the juniper ring width of Qilian Mountains, *Q. Tian*		**8** Age of the *Pinus sylvestris* trees and forests in northeastern Finnish Lapland, *T. Wallenius*	
12:20–13:40	*Lunch*			
	Plenary session: Chair: *Prof. James H. Speer*			
13:40–14:00	*Prof. Nathsuda Pumijumnong*	Asian Dendrochronology – past and present experiences and future challenges		
14:00–14:20	*Prof. Fidel Roig*	The multi-millennial-length tree-ring records in the Southern Hemisphere: current development and perspectives		
14:20–14:40	*Prof. Achim Bräuning*	Atomization of a discipline? Forward thinking for a retrospective science		
14:40–15:00	*Dr. Margaret Devall*	Dendrochronology and IUFRO: history, recent activities and the future		
15:00–15:30	*Coffee break*			
15:30–15:50	*Prof. Dieter Eckstein*	Lessons learned on potentials and future directions of dendrochronology		
15:50–16:10	*Prof. James H. Speer*	Concluding remarks		
16:10–16:45	*Väinö Jalkanen*	Music; Sibelius & Rautavaara		
	Announcement of the host for the 9th conference			
	Prof. Kari Mielikäinen: WorldDendro2010 adjourns			
20:00–00:30	WorldDendro2010 Farewell Dinner			



Saturday, June 19, 2010–

Post-conference excursions