Valérie Trouet

Professor of Dendrochronology
Laboratory of Tree-Ring Research, University of Arizona
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EDUCATION

2004	**PhD, Bioscience Engineering** — Katholieke Universiteit Leuven, Belgium Dissertation: The El Niño Southern Oscillation effect on Zambezian miombo vegetation: proxies from tree-ring series and satellite-derived data
1999	**MEng, Bioscience Engineering** — Ghent University, Belgium
1997	**BSc, Bioscience Engineering** — Ghent University, Belgium
1995–96	Erasmus Exchange Programme — Rheinische Friedrich Wilhelm Universität, Bonn, Germany

HISTORY OF EMPLOYMENT

University of Arizona, Laboratory of Tree-Ring Research

2020–present	**Professor of Dendrochronology**
2015–2020	**Associate Professor of Dendrochronology**
2011–2015	**Assistant Professor of Dendrochronology**

Joint Faculty appointments:

- Department of Geosciences (2016–present)
- Department of Hydrology and Atmospheric Sciences (2017–present)
- School of Natural Resources and the Environment (2011–present)
- Graduate Interdisciplinary Program in Global Change (2011–present)
- Graduate Interdisciplinary Program in Arid Lands (2015–present; Executive Committee 2020–2022)

Vrije Universiteit Brussel, Department of Water and Climate

2026–present **Gewoon Hoogleraar** (10%)

Belgian Climate Centre

2023–2024 **Founding Scientific Director**

The Belgian Climate Centre was established in November 2022 to coordinate scientific research in Belgium on climate and related economic and ecological issues. Its mission is to maximise the impact of science on climate mitigation and adaptation in Belgium to support an efficient and socially just transition.

Key responsibilities: defining BCC mission and strategic plan; establishing Steering Committee and Scientific Board; recruiting team members; interacting with policy makers, private sector, and media.

Key achievements: made 100+ years of climate data and regional projections publicly available; secured ECMWF funding for data homogenization; established the Scientific Climate Council; developed a Belgian climate science expert catalogue; organized the first Belgian Science for Climate Action Conference (400 participants); organised the first leadership meeting of European National Climate Centres.

Board and Advisory Roles (2023–2024):

- Architecture Workroom Brussels — Board Member
- WWF Belgium — General Assembly Member
- Royal Meteorological Institute, Belgium — Scientific Board Member
- CERAC (Climate Risk Assessment Center Belgium) — Advisory Board Member
- University Hasselt, Strategic Research Programme — Review Committee Member

Swiss Federal Institute for Forest, Snow, and Landscape Research (WSL, ETH Domain)

2007–2010 **Research Scientist**, Dendrosciences Unit

The Pennsylvania State University, Department of Geography

2005–2006 **Post-Doctoral Research Associate**

RESEARCH INTERESTS

Past, present, and future climate variability and its influence on forest ecosystems and human societies. Research on climate variability focuses on climate reconstruction over the Common Era, atmospheric circulation patterns, and climate extremes. Research on forest ecosystems includes their role in the carbon cycle, forest disturbances, and dry tropical forests.

HONORS AND AWARDS

2025	Foreign member, Royal Flemish Academy of Belgium for Arts and Sciences
2025	Fellow, American Association for the Advancement of Science (AAAS)
2024	Gouden Penning, Royal Flemish Academy of Belgium for Arts and Sciences
2023	Doctor honoris causa, Wageningen University & Research, Netherlands
2022	UArizona Women of Impact Award
2022	Leadership in Quaternary Sciences Award (American Quaternary Association)
2020	Jan Wolkers Prize (World Wildlife Fund)
2016, 2020	Kavli Fellow (National Academy of Sciences)
2019	Willi Dansgaard Award (American Geophysical Union)
2018	UArizona Distinguished Scholar Award
2017–18	Udall Center Fellow (UArizona)
2017	Henry C. Cowles Award for Best Publication (AAG Biogeography specialty group), for Taylor, Trouet et al. 2016
2016	NOAA NCEI Paper of the Year Award, for Belmecheri et al. 2016
2014	National Science Foundation CAREER Award
2000–2003	Institute for the Promotion of Innovation by Science and Technology in Flanders — Doctoral Research Fellow
1999	Belgian Development Cooperation Prize for MS thesis

PUBLICATIONS

Books

2026 **OverMorgen** (NL)
Essay: De Planeet zal niet verdwijnen, maar wat met onze beschaving
Pelckmans Uitgevers (editor: Walter Damen)

2025 **In the Circle of Ancient Trees: Our Oldest Trees and the Stories They Tell** (ENG)
Consulting editor; 11 contributing dendrochronologists; illustrated by Blaze Cyan.
Greystone Books (North America) / UniPress (UK); translated into Dutch as In de ban van de jaarring (Lannoo, October 2025); French, Arabic

2023 **Over Bomen en Mensen: geschiedenis en toekomst van ons klimaat** (NL)
Academic & Scientific Publishers (Karel Poma lecture, March 2023)

2020 **Tree Story: A History of the World Written in Rings** (ENG)
Johns Hopkins University Press. Translated into 7 languages (Dutch: Wat bomen ons vertellen, Lannoo, 2020)
Winner: Jan Wolkers Prize (WWF) 2020 | Gold Winner: 2020 Foreword INDIES Award (Ecology & Environment) | Bronze Winner: 2021 Independent Publisher Book Award | Finalist: AAP 2021 PROSE Award (Environmental Science)

Metrics (July 2026)

H-index: 58 (Google Scholar) | Total ISI-listed publications: 111 | Total citations: 15,110 | Highest-cited first-authored paper: Trouet et al. (2009) Science — 1,268 citations
Underlined authors are student or post-doctoral advisees.

Submitted / In Revision / In Preparation

(120) Xu G, Dorado-Liñàn I, Liu X, Broadman E, Shi J, Wang B, Wu G, Wang W, Zeng X, **Trouet V** (in prep.) The response to hydroclimate extremes is asymmetric in tree-ring width but less so in stable isotopes.

(119) Yang C, Xu G, Wu X, Wang B, Babst F, **Trouet V** (in prep.) Concurrent heat raises the ecological cost of drought-driven vegetation damage.

(118) Shi S, Shi J, Nakatsuka T, Yang B, **Trouet V**, Li Z, Masaki S, Zhao J, Wang X, Xu G, Li J, Lu H (in prep.) Decadal droughts in lower Yangtze River basin fueled expansion of Chu state in Eastern Zhou Dynasty in southern China.

(117) Verschuren L, Haneca K, Oger C, Boone MN, De Frenne P, Fraiture P, Labbas V, Matskovsky V, Meir L, **Trouet V**, Van Acker J, Verstraeten A, Van den Bulcke J (in prep.) Micro-CT enables collection-scale investigation of concealed wooden covers from medieval manuscripts.

(116) McDowell N, Zhang Yue, Fernandez de Una L, Li L, Forzieri G, Holm J, Keenan T, Zhang Yao, Dannenberg M, Rahman M, **Trouet V**, Zuidema P, et al. (in prep.) Processes underlying changing resilience and regime shifts of global ecosystems. Nature Reviews Earth and Environment

(115) Zhou F, Fang K, Ou T, **Trouet V**, Jeong JH, Chen D, Linderholm HW, Zhang P, Zhang Y, Camarero JJ, Wang Y, Chen F (in prep.) Unprecedented land-atmosphere coupling drives post-monsoon drought over the Yangtze River Basin towards a tipping point.

(114) Wang F, Wang S, Dannenberg M, Wise E, Klockmann M, Peng Z, **Trouet V**, Qin C, Kang Y, Yang Y, Lin G, Gao C, Xiang M, Nakatsuka T, Li Z, Stenseth NC, Yang B (submitted) Circulation-driven shifts in China's arid-humid boundary and agro-societal hazards over 500 years.

(113) An W, Treydte K, **Trouet V**, Ren S, Xu C, Yin Q, Babst F, Zhang Q, Neukom R, Liu L, Wang Z, Guo Z (submitted) High Mountain Asia glacier evolution driven by Polar Jet. JGR Atmospheric Sciences

(112) Broadman E, Meko D, Pearl JK, Svoma B, Cook Bishop J, Sheriff T, Sievert F, **Trouet V** (in review) A multi-century perspective on the response of streamflow in Arizona's Salt River basin to 21st century megadrought. Water Resources Research

2026

(111) Verschuren L, Matskovsky V, Boone M, De Frenne P, De Mil T, Haneca K, Marathe S, Pearson C, Rau C, Sass-Klaassen U, Van Acker J, Vandekerkhove K, Wanelik K, **Trouet V**, Van den Bulcke J: Beech latewood density as a proxy for temperature reconstruction. Science Advances 12, eaee1305(2026). DOI:10.1126/sciadv.aee1305

(110) Kunz M, Torbenson MCA, Reinig F, Martinez del Castillo E, Büntgen U, Wilson R, Homfeld IK, King G, Reid E, Anchukaitis K, **Trouet V**, King KE, Harley GL, Maxwell JT, Csank A, Broadman E, Kuhl E, Edwards J, Römer P, Günther B, Gerber C, Esper J: Exorcizing divergence in tree-ring density along the Rocky Mountains. JGR Biogeosciences DOI: 10.1029/2026JG009783

2025

(109) Broadman E, Kornhuber K, Dorado-Liñan I, Xu G, **Trouet V**: A millennium of ENSO influence on jet stream driven summer climate extremes. AGU Advances DOI:10.1029/2024AV001621

(108) Zuidema P, Babst F, Groenendijk P, **Trouet V** et al.: Pantropical tree growth resilience to drought. Science DOI: 10.1126/science.adq6607

(107) Verschueren L, Matskovsky V, Boone MN, Van Hoorebeke L, Van Acker J, De Mil T, **Trouet V**, Pearson C, De Bolle J, Gheyle T, Van den Bulcke J: X-ray micro-CT pipeline for large-scale tree-ring densitometry studies. Dendrochronologia DOI: 10.1016/j.dendro.2025.126343

(106) Bregy JC, Maxwell JT, Robeson SM, Harley GL, **Trouet V**: Changes in the Western Flank of the North Atlantic Subtropical High since 1140 CE: Extremes, drivers, and hydroclimate patterns. Science Advances DOI: 10.1126/sciadv.adr5065

(105) Groenendijk P, Babst F, **Trouet V** et al.: The importance of tropical tree-ring chronologies for global change research. Quaternary Science Reviews DOI: 10.1016/j.quascirev.2025.109233

2024

(104) Xu G, Broadman E, Dorado-Liñan I, Klippel L, Meko M, Büntgen U, De Mil T, Esper J, Gunnarson B, Hartl C, Krusic P, Linderholm H, Ljungqvist F, Ludlow F, Panayotov M, Seim A, Wilson R, Zamora-Reyes D, **Trouet V**: Jet stream controls on European climate and agriculture since 1300 CE. Nature DOI:10.1038/s41586-024-07985-x

(103) De Mil T, Matskovsky V, Salzer M, Corluy L, Verschuren L, Pearson C, Van Hoorebeke L, **Trouet V**, Van den Bulcke J: Bristlecone Pine Maximum Latewood Density as a superior proxy for millennium-length temperature reconstructions. Geophysical Research Letters DOI: 10.1029/2024GL109799

(102) Yao Q, Zheng B, Wang X, Hudson A, Fang K, Zhu C, Hu H, Li Y, Han S, **Trouet V**: Anthropogenic warming is a key climate indicator of rising urban fire activity in China. National Science Review doi.org/10.1093/nsr/nwae163

(101) Kuhl E, Esper J, Schneider L, **Trouet V**, Kunz M, Klippel L, Büntgen U, Hartl C: Revising Alpine summer temperatures since 881 CE. Climate Dynamics doi.org/10.1007/s00382-024-07195-1

(100) U'Ren J, Oita S, Lutzoni F, Miadlikowska J, Ball B, Carbone I, May G, Zimmerman N, Valle D, **Trouet V**, Arnold AE: Environmental drivers and cryptic biodiversity hotspots define endophytes in Earth's largest terrestrial biome. Current Biology doi.org/10.1016/j.cub.2024.01.063

(99) Yao Q, Zheng B, Fang K, Hudson A, Zhou F, Bing X, Chen H, Tan H, Guo F, **Trouet V**: Modulations of NAO on the interplay between monsoon and westerlies in Asia on interdecadal timescales. Climate Dynamics doi.org/10.1007/s00382-024-07115-3

2023

(98) Ols C, Klesse S, Girardin MP, Evans MEK, DeRose RJ, **Trouet V**: Detrending climate data prior to climate-growth analyses in dendroecology: a common best practice? Dendrochronologia doi.org/10.1016/j.dendro.2023.126094

(97) MacDonald G, Wall T, Enquist C, LeRoy S, Bradford J, Breshears D, Brown T, Cayan D, Dong C, Falk D, Fleishman E, Gershunov A, Hunter M, Loehman R, Van Mantgem P, Middleton BR, Safford H, Schwartz M, **Trouet V**: Drivers of California's changing wildfires: a state-of-the-knowledge synthesis. International Journal of Wildland Fire doi.org/10.1071/WF22155

(96) Wang Z, Huang R, Yao Q, Zheng B, Zhang G, **Trouet V**: Strong wind drives grassland fire in China. Environmental Research Letters doi.org/10.1088/1748-9326/aca921

2022

(95) Hu HM, **Trouet V**, Moore GWK, Spötl C, Tsai HC, Chien WY, Sung WH, Michel V, Yu JY, Valensi P, Jiang X, Duan F, Wang Y, Mii HS, Chou YM, Lone MA, Starnini E, Zunino M, Watanabe TK, Watanabe T, Hsu HH, Lee SY, Shen CC: Multiscale northern westerlies drift in Europe since the middle Holocene. Nature Communications doi.org/10.1038/s41467-022-34952-9

(94) Zamora-Reyes D, Broadman E, Bigio E, Black B, Meko D, Woodhouse CA, **Trouet V**: The unprecedented character of California's 20th century enhanced hydroclimatic variability in a 600-year context. Geophysical Research Letters doi.org/10.1029/2022GL099582

(93) Hu HM, Shen CC, Chiang JCH, **Trouet V**, Michel V, Tsai HC, Valensi P, Spötl C, Starnini E, Zunino M, Chien WY, Sung WH, Chien YT, Chang P, Korty R: Split westerlies over Europe in the early Little Ice Age. Nature Communications doi.org/10.1038/s41467-022-32654-w

(92) Yao Q, Fang K, Ou T, Zhou F, He M, Zheng B, Liu J, Xing H, **Trouet V**: Reply to: Fire activity as measured by burned area reveals weak effects of ENSO in China. Nature Communications

(91) Xu G, Liu X, Hu J, Dorado-Liñan I, Gagen M, Szejner P, Chen T, **Trouet V**: Intra-annual tree-ring δ18O and δ13C reveal a trade-off between isotopic source and humidity in moist environments. Tree Physiology doi.org/10.1093/treephys/tpac076

(90) Şahan EA, Köse N, Güner HT, **Trouet V**, Tavşanoğlu C, Akkemik U, Dalfes HN: Multi-century spatiotemporal patterns of fire history in black pine forests, Turkey. Forest Ecology and Management doi.org/10.1016/j.foreco.2022.120296

(89) Yang B, Qin C, Bräuning A, Osborn TJ, **Trouet V**, Charpentier Ljungqvist F, Esper J, Schneider L, Grießinger J, Büntgen U, Rossi S, Yan M, Wang J, Luterbacher J: Reply to Weiss — Tree-ring stable oxygen isotopes suggest an increase in Asian monsoon rainfall at 4.2 ka BP. PNAS doi.org/10.1073/pnas.2204067119

(88) Margolis E, Guiterman C, Chaverdès R, …, **Trouet V** et al.: The North American tree-ring fire-scar network. Ecosphere doi.org/10.1002/ecs2.4159

(87) Dorado-Liñan I, Ayarzaguena B, Babst F, Xu G, …, **Trouet V**: Jet stream position explains regional anomalies in European forest productivity. Nature Communications doi.org/10.1038/s41467-022-29615-8

(86) Chen F, Yuan Y, **Trouet V**, Büntgen U, Esper J, Chen F, Yu S, Shen M, Zhang R, Shang H, Chen Y, Zhang H: Ecological and societal effects of Central Asian streamflow variations over the past eight centuries. NPJ Climate and Atmospheric Science doi.org/10.1038/s41612-022-00239-5

(85) Zuidema P, Babst F, Groenendijk P, **Trouet V** et al.: Tropical tree growth driven by dry-season climate variability. Nature Geoscience doi.org/10.1038/s41561-022-00911-8

(84) Hudson AR, Smith WK, Moore DJP, **Trouet V**: Length of growing season is modulated by Northern Hemisphere jet stream variability. International Journal of Climatology doi.org/10.1002/joc.7553

(83) Zamora-Reyes D, Black B, **Trouet V**: Enhanced winter, spring, and summer hydroclimate variability across California from 1940 to 2019. International Journal of Climatology doi.org/10.1002/joc.7513

2021

(82) De Mil T, Meko M, Belmecheri S, February E, Therrell M, Van den Bulcke J, **Trouet V**: A lonely dot on the map: exploring the climate signal in tree-ring density and stable isotopes of Clanwilliam cedar, South Africa. Dendrochronologia doi.org/10.1016/j.dendro.2021.125879

(81) Maxwell JT, Bregy JC, Robeson SM, Knapp PA, Soulé PT, **Trouet V**: Recent increases in tropical cyclone precipitation extremes over the US East Coast. PNAS doi.org/10.1073/pnas.2105636118

(80) Şahan EA, Köse N, Akkemik U, Tuncay Güner H, Tavşanoğlu C, Bahar A, **Trouet V**, Nüzhet Dalfes H: Fire history of Pinus nigra in Western Anatolia: a first dendrochronological study. Dendrochronologia doi.org/10.1016/j.dendro.2021.125874

(79) Yang B, Qin C, Bräuning A, Osborn TJ, **Trouet V**, Charpentier Ljungqvist F, Esper J, Schneider L, Grießinger J, Büntgen U, Rossi S, Yan M, Wang J, Luterbacher J: Long-term decrease in Asian monsoon rainfall and abrupt climate change events over the past 6,700 years. PNAS doi.org/10.1073/pnas.2102007118

(78) Büntgen U, Allen K, Anchukaitis K, …, **Trouet V**, Wang J, Wilson R, Yang B, Xu G, Esper J: The influence of decision-making in tree ring-based climate reconstructions. Nature Communications doi.org/10.1038/s41467-021-23627-6

(77) Heilman K, **Trouet V**, Belmecheri S, Pederson N, Berke M, McLachlan J: Increased water use efficiency leads to decreased precipitation sensitivity of tree growth, but is offset by high temperatures. Oecologia doi.org/10.1007/s00442-021-04892-0

(76) Fang K, Yao Q, Guo Z, Zheng B, Du J, Ou T, Liu J, He M, **Trouet V**: ENSO modulates wildfire activity in China. Nature Communications doi.org/10.1038/s41467-021-21988-6

2020

(75) Rollinson CR, Alexander MR, Dye AW, Moore DJP, Pederson N, **Trouet V**: Climate sensitivity of understory trees differs from overstory trees in temperate mesic forests. Ecology doi.org/10.1002/ecy.3264

(74) Thapa UK, St George S, **Trouet V**: Poleward excursions by the Himalayan Subtropical Jet over the past four centuries. Geophysical Research Letters doi.org/10.1029/2020GL089631

(73) Gutiérrez-García G, Leavitt S, **Trouet V**, Carriquiry J: Tree-ring based historic hydroclimatic variability of the Baja California Peninsula. Journal of Geophysical Research – Atmospheres doi.org/10.1029/2020JD032675

(72) Liu Y, Song H, An Z, Sun C, **Trouet V**, Cai Q, Liu R, Leavitt SW, Song Y, Li Q, Zhou W, Fang C, Yang Y, Jin Z, Wang Y, Sun J, Mu X, Lei Y, Wang L, Li X, Ren M, Cui L, Zeng X: Recent anthropogenic curtailing of Yellow River runoff and sediment load is unprecedented over the past 500 years. PNAS doi.org/10.1073/pnas.1922349117

(71) Xu G, Liu X, Sun W, Szejner P, Zeng X, Yoshimura K, **Trouet V**: Seasonal divergence between soil water availability and atmospheric moisture recorded in intra-annual tree-ring δ18O extremes. Environmental Research Letters doi.org/10.1088/1748-9326/ab9792

(70) Xu G, Wu G, Liu X, Chen T, Wang B, Hudson A, **Trouet V**: Age-related climate response of tree-ring δ13C and δ18O from spruce in northwestern China, with implications for relative humidity reconstructions. Journal of Geophysical Research – Biogeosciences doi.org/10.1029/2019JG005513

(69) Zafirov N, Panayotov M, Tsvetanov N, Nikolchova I, **Trouet V**: Dendroclimatic analysis of Pinus peuce Griseb. at subalpine and treeline locations in Pirin Mountains, Bulgaria. Dendrochronologia doi.org/10.1016/j.dendro.2020.125703

(68) Altman J, Treydte K, Pejcha V, Cerny T, Petrik P, Srutek M, Song J, **Trouet V**, Dolezal J: Tree growth response to recent warming of two endemic species in Northeast Asia. Climatic Change doi.org/10.1007/s10584-020-02718-1

2019

(67) Björklund J, von Arx G, Nievergelt D, …, Meko M, De Mil T, **Trouet V**, …, Frank DC: Scientific merits and analytical challenges of tree-ring densitometry. Reviews of Geophysics doi.org/10.1029/2019RG000642

(66) Hudson A, Alfaro-Sánchez R, Babst F, Belmecheri S, Moore DJP, **Trouet V**: Seasonal and synoptic climatic drivers of tree growth in the Bighorn Mountains, WY (1654–1983 CE). Dendrochronologia doi.org/10.1016/j.dendro.2019.125633

(65) Xu G, **Trouet V**, Liu X, Hudson A, Zhang Q: Century-scale temperature variability and onset of industrial-era warming in the Eastern Tibetan Plateau. Climate Dynamics doi.org/10.1007/s00382-019-04807-z

(64) Wahl ER, Zorita E, **Trouet V**, Taylor AH: Jet stream dynamics, hydroclimate, and fire in California from 1600 CE to present. PNAS doi.org/10.1073/pnas.1815292116

(63) Klippel L, Krusic PJ, Konter O, St. George S, **Trouet V**, Esper J: A 1200+ year reconstruction of temperature extremes for the northeastern Mediterranean region. International Journal of Climatology doi.org/10.1002/joc.5955

(62) Babst F, Bouriaud O, Poulter B, **Trouet V**, Girardin MP, Frank DC: Twentieth century redistribution in climatic drivers of global tree growth. Science Advances DOI: 10.1126/sciadv.aat4313

2018

(61) Alfaro-Sánchez R, Nguyen H, Klesse S, Hudson A, Belmecheri S, Köse N, Diaz HF, Monson RK, Villalba R, **Trouet V**: Climatic and volcanic forcing of tropical belt northern boundary over the past 800 years. Nature Geoscience doi.org/10.1038/s41561-018-0242-1

(60) Babst F, Bodesheim P, Charney N, Friend A, Girardin M, Klesse S, Moore DJP, Seftigen K, Björklund J, Bouriaud O, Dawson A, DeRose R, Dietze M, Eckes A, Enquist B, Frank DC, Mahecha MD, Poulter B, Record S, **Trouet V**, Turton R, Zhang Z, Evans MEK: When tree rings go global: challenges and opportunities for retro- and prospective insight. Quaternary Science Reviews doi.org/10.1016/j.quascirev.2018.07.009

(59) Ols C, Girardin MP, **Trouet V**, Hofgaard A, Bergeron Y, Drobyshev I: Post-1980 shifts in the sensitivity of boreal tree growth to North Atlantic Ocean dynamics and seasonal climate. Global and Planetary Change doi.org/10.1016/j.gloplacha.2018.03.006

(58) Xu G, Liu X, **Trouet V**, Treydte K, Wu G, Chen T, Sun W, Wang W, Zeng X, Qin D: Regional drought shifts (1700–2011) in East Central Asia and linkages with atmospheric circulation recorded in tree-ring δ18O. Climate Dynamics doi.org/10.1007/s00382-018-4215-2

(57) **Trouet V**, Babst F, Meko M: Recent enhanced high-summer North Atlantic Jet variability emerges from three-century context. Nature Communications doi.org/10.1038/s41467-017-02699-3

(56) Alfaro-Sánchez R, Camarero JJ, Sánchez-Salguero R, **Trouet V**, De las Heras J: How do droughts and wildfires alter seasonal radial growth in Mediterranean Aleppo pine forests? Tree-Ring Research dx.doi.org/10.3959/1536-1098-74.1.1

2017

(55) Alexander MR, Rollinson CR, Babst F, **Trouet V**, Moore DJP: Relative influences of multiple sources of uncertainty on cumulative and incremental tree-ring-derived aboveground biomass estimates. Trees – Structure and Function doi.org/10.1007/s00468-017-1629-0

(54) **Trouet V**, Dominguez-Delmas M, Pearson C, Pederson N, Rubino D: Dendro-archeo-ecology in North America and Europe: Re-purposing historical materials to study ancient human-environment interactions. In: Amoroso M et al. (eds.) Dendroecology: Tree-ring analyses applied to ecological studies, Springer, pp. 365–394.

(53) Marlon JR, Pederson N, Nolan C, Goring S, Shuman B, Booth R, Bartlein P, Berke MA, Clifford M, Cook ER, Dieffenbacher-Krall A, Hessl A, Hubeny JB, Jackson S, Marsicek J, McLachlan J, Mock CJ, Moore DJP, Nichols J, Robertson A, Schaefer K, **Trouet V**, Umbanhowar C, Williams J, Yu Z: Climatic history of the northeastern United States during the past 3000 years. Climate of the Past doi.org/10.5194/cp-13-1355-2017

(52) Montane F, Fox A, Arellano A, MacBean N, Alexander MR, Dye A, Bishop D, **Trouet V**, Babst F, Hessl A, Pederson N, Blanken P, Bohrer G, Gough C, Litvak M, Novick K, Phillips R, Wood J, Moore DJP: Evaluating the effect of alternative carbon allocation schemes in a land surface model on carbon fluxes, pools, and turnover in temperate forests. Geoscientific Model Development doi.org/10.5194/gmd-10-3499-2017

(51) Belmecheri S, Babst F, Hudson AR, Betancourt J, **Trouet V**: Northern Hemisphere Jet Stream position indices as diagnostic tools for climate and ecosystem dynamics. Earth Interactions doi.org/10.1175/EI-D-16-0023.1

(50) Klippel L, Krusic PJ, Brandes R, Hartl-Meier C, **Trouet V**, Esper J: High-elevation inter-site differences in Mount Smolikas tree-ring width data. Dendrochronologia doi.org/10.1016/j.dendro.2017.05.006

(49) Yao Q, Brown PM, Liu S, Rocca ME, **Trouet V**, Zheng B, Chen H, Li Y, Wang X: Pacific-Atlantic Ocean influence on wildfires in northeast China (1774–2010). Geophysical Research Letters doi.org/10.1002/2016GL071821

(48) Konter O, Krusic P, **Trouet V**, Esper J: Meet Adonis, Europe's oldest dendrochronologically dated tree. Dendrochronologia doi.org/10.1016/j.dendro.2016.12.001

2016

(47) Taylor AH[1], **Trouet V[1]**, Skinner CN, Stephens SL: Socio-ecological transitions trigger fire regime shifts and modulate fire-climate interactions in the Sierra Nevada, USA 1600–2015 CE. PNAS DOI: 10.1073/pnas.1609775113 [[1]Equal contribution] [Henry C. Cowles Award for Best Publication, AAG]

(46) Szejner P, Wright WE, Babst F, Belmecheri S, **Trouet V**, Leavitt SW, Ehleringer JR, Monson RK: Latitudinal gradients in tree-ring stable carbon and oxygen isotopes reveal differential climate influences of the North American Monsoon system. Journal of Geophysical Research – Biogeosciences doi.org/10.1002/2016JG003460

(45) Charney ND, Babst F, Poulter B, Record S, **Trouet V**, Frank D, Enquist BJ, Evans MEK: Observed forest sensitivity to climate implies larger reductions in 21st century forest growth. Ecology Letters doi.org/10.1111/ele.12650

(44) Esper J, Krusic PJ, Ljungqvist F, Luterbacher J, Carrer M, Cook ER, Davi NK, Hartl-Meier C, Kirdyanov A, Konter O, Myglan V, Timonen M, Treydte K, **Trouet V**, Villalba R, Wilson RS, Yang B, Büntgen U: Ranking of tree-ring based temperature reconstructions of the past millennium. Quaternary Science Reviews 145: 134–151.

(43) O'Donnell A, Allen K, Evans R, Cook ER, **Trouet V**, Baker PJ: Wood density provides new opportunities for reconstructing past temperature variability from southeastern Australian trees. Global and Planetary Change 141: 1–11.

(42) Black BA, Griffin D, Van der Sleen P, Wanamaker AD, Speer JH, Frank DC, Stahle DW, Pederson N, Copenheaver CA, **Trouet V**, Griffin S, Gillanders BM: The value of crossdating to retain high-frequency variability, climate signals, and extreme events in environmental proxies. Global Change Biology 22: 2582–2595.

(41) **Trouet V**, Harley G, Dominguez-Delmas M: Shipwreck rates reveal Caribbean tropical cyclone response to past radiative forcing. PNAS 113: 3169–3174.

(40) Belmecheri S, Babst F, Wahl ER, Stahle DW, **Trouet V**: Multi-century evaluation of Sierra Nevada snowpack. Nature Climate Change doi.org/10.1038/nclimate2809 [NOAA NCEI Paper of the Year Award 2016]

2015

(39) Cook ER and 55 co-authors including **Trouet V**: Old World megadroughts and pluvials during the Common Era. Science Advances doi.org/10.1126/sciadv.1500561

(38) Baker A, Hellstrom J, Kelly BFJ, Mariethoz G, **Trouet V**: A composite annual-resolution stalagmite record of North Atlantic climate over the last three millennia. Scientific Reports DOI: 10.1038/srep10307

(37) Dawson A, Austin D, Walker D, Appleton A, Gillanders BM, Griffin SM, Sakata C, **Trouet V**: A tree-ring based reconstruction of early summer precipitation in southwestern Virginia (1750–1981). Climate Research 64: 243–256.

(36) Klesse S, Ziehmer M, Rousakis G, **Trouet V**, Frank D: Synoptic drivers of 400 years of summer temperature and precipitation variability on Mt. Olympus, Greece. Climate Dynamics 45: 807–824.

(35) Seim A, Treydte K, **Trouet V**, Frank D, Fonti P, Tegel W, Panayotov M, Fernandez Donado L, Büntgen U: Climate sensitivity of Mediterranean pine growth reveals a distinct west-east dipole structure. International Journal of Climatology DOI: 10.1002/joc.4137

2014

(34) **Trouet V**: A tree-ring based late summer temperature reconstruction (1675–1980) for the northeastern Mediterranean. Tree-Ring Research / Radiocarbon 56: 69–78.

(33) Babst F, Alexander MR, Moore DJ, Frank DC, Klesse S, Bouriaud O, Poulter B, Ciais P, Roden J, **Trouet V**: A tree-ring perspective on the terrestrial carbon cycle. Oecologia DOI: 10.1007/s00442-014-3031-6

(32) Babst F, Bouriaud O, Alexander MR, **Trouet V**, Frank D: Toward consistent measurements of carbon accumulation: a multi-site assessment of biomass and basal area increment across Europe. Dendrochronologia 32: 153–161.

(31) Diaz H, **Trouet V**: Some perspectives on societal impacts of past climatic changes. History Compass 12(2): 160–177.

2013

(30) **Trouet V**, Diaz HF, Wahl ER, Viau AE, Cook ER: A 1500-year reconstruction of annual mean temperature for temperate North America on decadal-to-multidecadal time-scales. Environmental Research Letters DOI: 10.1088/1748-9326/8/2/024008

(29) PAGES2K Consortium (including **Trouet V**): Continental-scale temperature variability during the past two millennia. Nature Geoscience DOI: 10.1038/NGEO1797 [ISI highly cited]

(28) De Ridder M, **Trouet V**, Van den Bulcke J, Hubau W, Van Acker J, Beeckman H: A tree-ring based comparison of Terminalia superba climate-growth relationships in West and Central Africa. Trees – Structure and Function DOI: 10.1007/s00468-013-0871-3

(27) **Trouet V**, Van Oldenborgh GJ: KNMI Climate Explorer: a web-based research tool for high-resolution paleoclimatology. Tree-Ring Research 69(1): 3–13. [ISI highly cited; most read and second most cited paper in TRR in 2017]

(26) Babst F, Poulter B, **Trouet V**, Kun T, Neuwirth B, Wilson R, Carrer M, Grabner M, Tegel W, Levanic T, Panayotov M, Urbinati C, Bouriaud O, Ciais P, Frank D: Site- and species-specific responses of forest growth to climate across the European continent. Global Ecology and Biogeography DOI: 10.1111/geb.12023 [ISI highly cited; top cited 2013–14 GEB paper]

2012

(25) **Trouet V**, Mukelabai M, Verheyden A, Beeckman H: Cambial growth season of brevi-deciduous Brachystegia spiciformis trees from South Central Africa restricted to four months. PLoS ONE 7(10): e47364.

(24) Seim A, Büntgen U, Fonti P, Haska H, Herzig F, Tegel W, **Trouet V**, Treydte K: The paleoclimatic value of a millennium-long tree-ring chronology from Albania. Climate Research DOI: 10.3354/cr01076

(23) **Trouet V**, Panayotov M, Ivanova A, Frank DC: A pan-European summer teleconnection mode revealed by a new temperature reconstruction from the northeastern Mediterranean (1768–2008). The Holocene DOI: 10.1177/0959683611434225

(22) **Trouet V**, Scourse JD, Raible CC: North Atlantic storminess and Atlantic Meridional Overturning Circulation in the last Millennium: reconciling contradictory proxy records of NAO variability. Global and Planetary Change DOI: 10.1016/j.gloplacha.2011.10.003 [Most cited paper in GPC in 2012]

2011

(21) Baker A, Wilson R, Fairchild I, Franke J, Spötl C, **Trouet V**: High resolution δ18O and δ13C records of the last millennium climate from an annually laminated Scottish stalagmite. Global and Planetary Change DOI: 10.1016/j.gloplacha.2010.12.007

(20) Büntgen U, Tegel W, Nicolussi K, McCormick M, Frank D, **Trouet V** et al.: 2500 years of European climate variability and human susceptibility. Science DOI: 10.1126/science.1197175 [ISI highly cited]

(19) **Trouet V**: Paleoclimate. In: Mastrandrea M, Schneider SH, Root TL (eds.) The Encyclopedia of Climate and Weather, Oxford University Press, 2nd edn, pp. 391–394.

(18) **Trouet V**: Little Ice Age. In: Mastrandrea M, Schneider SH, Root TL (eds.) The Encyclopedia of Climate and Weather, Oxford University Press, 2nd edn, pp. 241–243.

2010

(17) **Trouet V**, Esper J, Beeckman H: Climate/growth relationships of Brachystegia spiciformis from the Miombo woodland in southern Africa. Dendrochronologia DOI: 10.1016/j.dendro.2009.10.002

(16) **Trouet V**, Taylor AH: Multi-century variability in the Pacific North American (PNA) circulation pattern reconstructed from tree rings. Climate Dynamics DOI: 10.1007/s00382-009-0605-9

(15) **Trouet V**, Taylor AH, Wahl ER, Skinner CN, Stephens SL: Fire-climate interactions in the American West since 1400 CE. Geophysical Research Letters DOI: 10.1029/2009GL041695

(14) Büntgen U, Frank D, **Trouet V**, Esper J: Diverse growth trends and climate responses of high-elevation Mediterranean tree-ring width and density. Trees – Structure and Function DOI: 10.1007/s00468-009-0396-y

(13) Büntgen U, **Trouet V**, Leuschner HH, Frank D, Friedrichs D, Esper J: A tree ring-based summer drought reconstruction for Central Germany reveals evidence of the Medieval Climate Anomaly. Quaternary Science Reviews DOI: 10.1016/j.quascirev.2010.01.003

(12) Frank D, Esper J, Raible C, Büntgen U, **Trouet V**, Joos F: Ensemble temperature reconstruction constraints on CO_2 feedbacks. Nature 463: 527–530.

(11) Panayotov M, Bebi P, **Trouet V**, Yurukov S: Climate signal in tree-ring chronologies of Pinus peuce and Pinus heldreichii from the Pirin Mountains in Bulgaria. Trees – Structure and Function 24: 479–490.

2009

(10) **Trouet V**, Esper J, Graham NE, Baker A, Frank DC, Scourse JD: Persistent positive North Atlantic Oscillation mode dominated the Medieval Climate Anomaly. Science 324: 78–80. [1,223 citations (GS)]

(9) **Trouet V**, Taylor AH, Carleton AM: Interannual variations in fire weather, fire extent, and synoptic-scale circulation patterns in northern California and Oregon. Theoretical and Applied Climatology 95: 349–360.

(8) Skinner CN, Abbott CS, Fry DL, Stephens SL, Taylor AH, **Trouet V**: Variation in fire regime characteristics in California's North Coast Range. Fire Ecology 5: 73–96.

(7) Friedrichs D, **Trouet V**, Büntgen U, Frank DC, Esper J, Neuwirth B, Löffler J: Twentieth century climate sensitivity of Central European tree species. Trees – Structure and Function 23: 729–739.

2008 and earlier

(6) Taylor AH, **Trouet V**, Skinner CN: Climatic influences on fire regimes in montane forests in the southern Cascades, California, USA. International Journal of Wildland Fire 17: 60–71.

(5) Yuan Y, Shao X, Wei W, Yu S, Gong Y, **Trouet V**: The potential to reconstruct Manasi River streamflow in the northern Tien Shan mountains (NW China). Tree-Ring Research 63: 81–93.

(4) **Trouet V**, Taylor AH, Carleton AM, Skinner CN: Fire-climate interactions in forests of the American Pacific Coast. Geophysical Research Letters 33: L18704.

(3) **Trouet V**, Coppin P, Beeckman H: Annual ring patterns in Brachystegia trees of the Miombo woodland reveal climatic influence. Biotropica 38(3): 375–382.

(2) Fichtler E, **Trouet V**, Beeckman H, Coppin P, Worbes M: Climatic signals in tree rings of Burkea africana and Pterocarpus angolensis from semi-arid forests in Namibia. Trees – Structure and Function 18: 422–451.

(1) **Trouet V**, Haneca K, Coppin P, Beeckman H: Tree ring analysis of Brachystegia spiciformis and Isoberlinia tomentosa: evaluation of the ENSO-signal in the miombo-woodland of eastern Africa. IAWA Journal 22: 385–399.

GRANTS

External

2024–2025	Vlaams Architectuurinstituut (VAI) Belgian Pavilion at Biennale Architettura Venice 2025: Building Biosphere; Co-I (consortium led by Bureau Bas Smets, BCC, University of Florence). €130,000.
2024–2026	ECMWF / Copernicus C3S2 – Homogenization of historical Belgian time series for the C3S Climate Data Store (NOISELESS); Co-I. €121,926.
2024–2026	ECMWF / Copernicus C3S NCP – Climate service for Belgian vector-borne disease management; Co-I. €200,000.
2024–2025	ESA Earth Explorer 12 Mission (Phase 0) – Earth Climate Observatory (ECO): Monitoring of the Earth Energy Imbalance; Co-I in international consortium.
2022–2025	NSF P2C2 Collaborative Research: Extending tree-ring reconstructions of Atlantic Gulf Basin hydroclimate over the Common Era using old-growth sinker wood; PI (transferred to Bryan Black). $400,335.
2021–2024	Research Foundation Flanders (FWO Belgium): ACTREAL – Accurate temperature reconstructions and climate change mapping in tree rings of ancient Bristlecone pines; Co-I. $39,272 to UArizona.
2019–2020	NSF CAREER INTERN supplement (graduate student: Diana Zamora-Reyes); sole PI. $22,514.
2019–2020	NSF CAREER INTERN supplement (graduate student: Amy Hudson); sole PI. $23,100.
2014–2019	NSF CAREER: Tree-ring based reconstruction of decadal to centennial-scale Northern Hemisphere Jetstream variability; sole PI. $587,442.
2013–2015	US Geological Survey Southwest Climate Science Center: Influence of interannual North Pacific Jet variability on Sierra Nevada fire regimes; PI. $139,280.
2013–2016	Department of Energy: Estimating carbon flux and storage — constraint of the Community Land Model using observations at different temporal scales; Co-I. $970,020.
2012–2014	NSF: Catalyzing International Partnerships in Community-related Environmental and Sustainability Research and Education; Co-I. $20,000.
2008–2009	European Science Foundation Exploratory Workshop Grant: Synoptic-scale Circulation Patterns over the last Millennium, Kippel, Switzerland; PI. €14,000.
2000–2003	Institute for the Promotion of Innovation by Science and Technology in Flanders: Doctoral Research Fellowship; sole PI. €80,000.
Other	NSF CAREER supplement ($2,724 · 2016–17); NSF travel award ($1,505 · 2015); PAGES NAM2K workshop ($5,000 · 2011–11); SNSF international visit (CHF 6,190 · 2010); ESF MedClivar exchange (€3,350 · 2009); Oeschger Center workshop (CHF 5,000 · 2008–09); EMS Young Scientist Travel Award (CHF 1,500 · 2008)

University of Arizona

2022–2023	UArizona AIRES Institute Resilience Grant: Leveraging tree-ring records to quantify causes, effects, and recurrence for Arizona's megadrought; Co-I. $93,942.
2016–2017	UArizona College of Science: Curriculum development for Interdisciplinary Courses (Global Change Analysis and Scientific Writing); sole PI. $10,000.
2016–2017	UArizona Water Environment and Energy Solutions: Influence of jet stream variability on North American landscape phenology; PI. $32,752.

2015–2016	UArizona College of Science: Dendroclimatic potential of Widdringtonia cedarbergensis, South Africa; sole PI. $9,986.
2015	UArizona CONACYT: Historic hydroclimatic variability of the Baja California Peninsula; Co-I. $25,000.
2014–2013	UArizona WEES: Hydrologically-driven spatial heterogeneity of tree productivity and climate sensitivity in the Southwest; PI. $39,994.
2012	UArizona SAHRA: Spatial heterogeneity of tree growth sensitivity to climate in the Jemez River Basin CZO; sole PI. $14,996.
2011	UArizona TRIF Optics/Imaging special program; Co-I. $14,941.

TEACHING

2016–present	**Scientific Writing (GEOS/WSM 595E)** — Graduate level (~10 students). Fall 2016, 2019–2021; Spring 2025, 2026.
2011–present	**Introduction to Dendrochronology (GEOS 439A/539A)** — Upper division/graduate (7–23 students). Fall 2011–12, 2014–2022, 2025.
2012–2014	**Introduction to Global Change (GC 170A)** — General education, 100 level (50–150 students). Spring 2012–2014.
2012–2014	**Renewable Natural Resources Seminar (RNR 696)** — Graduate level (5–10 students). Fall 2012–13, Spring 2013–14.

ADVISING

Post-Doctoral Advisees

2021–present	Ellie Broadman (Aug 2021–April 2024; March–September 2025); currently AZGS Research Scientist
2019	Tom De Mil (Jan–Dec 2019); currently Assistant Professor, University of Gembloux, Belgium
2018–2020	Guobao Xu; currently Assistant Professor, Northwest University, Xi'an, China
2016–2017	Raquel Alfaro-Sánchez; currently Research Scientist, Natural Resources Canada
2015–2016	Soumaya Belmecheri; currently Associate Professor, UArizona
2015	Genaro Gutiérrez-García; currently Assistant Professor, UNAM, Mexico
2013–2015	Flurin Babst; currently Assistant Professor, UArizona

Graduate Committee – Primary Advisor

2013–2017	Michael Ross Alexander, PhD, SNRE, UArizona; currently Research Analyst, Argonne National Laboratory
2013–2017	Paul Szejner, PhD, SNRE, UArizona; currently Research Scientist, Natural Resources Institute Finland
2015–2020	Amy Hudson, PhD, SNRE, UArizona; currently USDA Research Scientist
2017–2022	Diana Zamora-Reyes, PhD, HAS, UArizona; currently Research Scientist, USGS
2013–2015	Robert Shepard, MS, SNRE, UArizona
2011–2014	Zakia Hassan Khamisi, MS, SNRE, UArizona

Graduate Committee – Committee Member (selected)

2025	Sophie Zwartsenberg, PhD, Wageningen University & Research, Netherlands
2024	Johanna Van Passel, PhD, Applied Biological Sciences, KU Leuven, Belgium
2022	David Edge, PhD, Dept. of Geosciences, UArizona
2021	Rodrigo Valdes, PhD, Dept. of Hydrology and Atmospheric Sciences, UArizona
2019	Connor Nolan, PhD, Dept. of Geosciences, UArizona
2019	Laura Marshall, PhD, SNRE, UArizona
2017	Alison Fretz, MS, Dept. of Biology, University of New Mexico
2017	Qichao Yao, PhD, College of Forestry, Northeast Forestry University, Harbin, China
2016	Clementine Ols, PhD, Dept. of Forestry, UQAT, Quebec, Canada
2016	Vera De Cauwer, PhD, Applied Biological Sciences, KU Leuven, Belgium
2015	Rebecca Caroli, MS, Archeology, UArizona
2015	Emily L. Dynes, MS, SNRE, UArizona
2014	Jesper Björklund, PhD, Earth Sciences, University of Gothenburg, Sweden

2014	Astika Bhugeloo, MS, Geography, University of KwaZulu-Natal, South Africa
2013	Maaike De Ridder, PhD, Applied Biological Sciences, Ghent University, Belgium

SERVICE

Scientific Community

2018–2021	Editor, Geophysical Research Letters (American Geophysical Union)
2017, 2022–present	Associate Editor, Geophysical Research Letters
2010–2016	Associate Editor, Fire Ecology
2021–present	Scientific Advisory Board Member, Terrestrial Environmental Observatories (TERENO), Germany
2015–2018	Council Member, American Quaternary Association (AMQUA)
2015–present	Associate Member, Navareno Ecological Observatory (NEO)
2026	Selection Committee Member, AGU Fellows (Paleoclimate subsection)
2022	Selection Committee Member, AGU Science Ambassador Award
2017	Selection Committee Member, AGU Walter Sullivan Award for Excellence in Science Journalism
2016	Panel Member, White House Earth Observations Assessment (EOA)

Invited journal reviewer for >40 ISI-listed journals including Nature, Science, Nature Climate Change, Nature Geoscience, Nature Communications, PNAS, GRL, Global Change Biology, and others.

Grant reviewer for >10 national and international funding agencies including ERC, NSF, NERC, FWO, NWO, NSERC, NOAA, and others.

Conference & Workshop Convener (selected)

2024	First Belgian Science for Climate Action Conference – Causes and consequences of climate extremes (Brussels, Feb 19–20, 2024); organizer
2022	4th American Dendrochronology Conference (Montreal, Canada); scientific committee member
2018	10th World Dendro Conference (Thimphu, Bhutan); scientific committee member
2013	2nd American Dendrochronology Conference (Tucson, AZ; ~180 participants); co-chair, programming committee
2011	PAGES NAM2K Workshop (Tucson, AZ; ~15 participants); convener
2009	ESF Exploratory Workshop: Synoptic-scale Climate Dynamics over the Last Millennium (Kippel, CH; ~35 participants); convener
2012–2017	AGU Annual Meeting (multiple sessions on terrestrial carbon, paleoclimate proxies, and hydroclimate); convener

University of Arizona

2020–2022	Executive Committee Member, Graduate Interdisciplinary Program in Arid Lands
2018	Women in Science Lecture Series Organizer, UArizona College of Science
2015–2016	Search Committee Member, Earth Dynamics Observation cluster hire (5 positions)
2014–2015	Search Committee Member, Laboratory of Tree-Ring Research Director

OUTREACH, MEDIA & PUBLIC COMMUNICATION

Public Lectures — Belgium & Netherlands (selected)

May 2026	Natuurpunt Oostkamp, Oostkamp, BE — In de ban van de jaarring
Nov 2025	Bomen Beter Beheren, Ghent, BE — Wat oude bomen ons vertellen over klimaatverandering
Nov 2025	Leuven Leest, Leuven, BE — Boekvoorstelling In de ban van de jaarring
Nov 2025	Naturalis Biodiversity Center, Leiden, NL — book lecture
Nov 2025	LAARX Symposium, Van Hall Larenstein Hogeschool, Velp, NL
Feb 2025	Panel debate on Climate and Innovation, Flanders House, New York, NY
Nov 2024	Climate Event, University of Twente, Enschede, NL
Feb 2024	New Scientist Live on Climate, Hasselt, BE
Jan 2024	Special EU Climate Envoys Meeting, Ghent, BE
Mar 2023	Karel Poma Lezing, Antwerp, BE
May 2022	Nerdland Festival, BE

May 2022	Explore the North Festival, Leeuwarden, NL
Aug 2020	Palais des Beaux-Arts de Bruxelles, BE

Public Lectures — International (selected)

Mar 2026	Tucson Festival of Books, Tucson, AZ
Sep 2023	Hay Festival, Segovia, Spain
Jun 2023	INHA Festival (masterclass), Fontainebleau, France
Jun 2022	Prada Frames Symposium, Milan, Italy
Jun 2022	La Repubblica Blue and Green Festival, Italy
Oct 2022	California Environmental Law Conference, Yosemite
June 2022	Trees Florida 2022 Conference, FL
May 2022	Kendal Arboretum, Oberlin, OH
December 2021	International Society of Arboriculture (virtual)
Mar 2017	Key West Art and Historical Society, Key West, FL
Mar 2017	Florida Keys History and Discovery Center, Islamorada, FL

Belgian Media — Op-Eds, Column & Major Interviews (selected)

Regular monthly climate columnist, De Morgen (2022–2024). Frequent commentator on climate science, climate policy, and dendrochronology in Belgian national and Flemish media.

Nov 2024	Op-ed in De Morgen on climate communication; widely discussed across Belgian media landscape
Nov 2023	VRT — De inzichten, in conversation with Nic Balthazar
2023	Zwijgen is Geen Optie podcast — long-form interview on climate urgency and science-policy interface
Apr 2024	KVAB lecture broadcast — Taal en Klimaat, YouTube / KVAB channel
Nov 2019	Alleen Elvis Blijft Bestaan — 90-minute National TV interview (VRT)
May 2022	Touché — 120-minute radio interview (Radio 1, Belgium)

Regular appearances on: Terzake, De Afspraak, VRT Journaal, VRT Radio 1 De Ochtend; print features in De Standaard, De Morgen, De Tijd, Knack, Trends, Het Nieuwsblad, Humo, EOS Wetenschap.

Book-Related Media Coverage

In de ban van de jaarring / In the Circle of Ancient Trees (2025):

VRT NWS feature article (Nov 11, 2025); interviews with VRT Radio 1, Lannoo promotional coverage; book launch events across Belgium and the Netherlands.

Tree Story / Wat bomen ons vertellen (2020):

Podcast interviews: BBC Science in Action, BBC The Forum, Radiolab (The Fellowship of the Tree Rings), In Defense of Plants, Living on Earth, Climate History, Weather Geeks, This Week in Science, Lady Science, Talk Nerdy, Historically Thinking, The Spectator, deBuren, Eik & Ik.

Print/broadcast: New York Times, La Repubblica, Voz Populi, El Periodico, Wildflower Magazine, Christian Science Monitor; >20 radio interviews including NPR and BYURadio Constant Wonder.

Dutch edition (Wat bomen ons vertellen): VPRO Gids, De Volkskrant, NRC Handelsblad, De Morgen, NPO Radio 1, Gazet van Antwerpen, VRT Radio 1, New Scientist (NL), Knack, Humo; Zomerhuis met Boeken (VRT).

Research Coverage (selected)

Xu et al. 2024 Nature	Coverage of jet stream controls on European climate and agriculture across major European and Belgian outlets
Trouet et al. 2018 Nature Comms	NPR, Bloomberg, InsideClimateNews, Le Figaro, Energy Transition podcast
Wahl et al. 2019 PNAS	NPR's Science Friday, AZ 360, ABC10 Sacramento, AZPM, New York Daily News
Belmecheri et al. 2016 Nat. Clim. Ch.	New York Times, LA Times, Washington Post, USA Today, The Guardian, San Francisco Chronicle, Reuters, CBS, NBC, National Geographic; >15 radio interviews [NOAA NCEI Paper of the Year]
Trouet et al. 2016 PNAS	Radiolab (The Fellowship of the Tree Rings), Washington Post, Archeology magazine, El País, De Morgen, Popular Science, NTN24
Trouet et al. 2009 Science	Broad international coverage of Medieval Climate Anomaly research; >1,200 citations

Op-Eds & Essays

The Guardian, The Scientist; De Tijd, De Morgen, Knack, De Gids, Samenleving en Politiek.

Documentary Films & Books

- The Arc of Oblivion (Sandbox Films, 2023)
- Tree Stories (Amity Foundation, 2022)
- The Walking Forest (Rose Casella & Floris Leeuwenberg, 2022)
- Rebel Garden (art book, 2024)
- Comment regarder plus loin (Ysaline Parisis, L'Arbre de Diane, BE, 2024)
- Als we wisten wat we deden, heette het geen onderzoek (Jim & Dolf Jansen, Fontaine Uitgevers, NL, 2023)
- Voetballers zijn net bewegende deeltjes (Jim Jansen, Veen Media, NL, 2021)
- Taking Earth's Temperature (PBS paleoclimate documentary)

INVITED PRESENTATIONS AT CONFERENCES & WORKSHOPS

(19) 2022	Changing Climates, Changing Histories: Perspectives from the Humanities, Dumbarton Oaks Research Library and Collection (Oct 22, 2022) — Tree Story
(18) 2021	TRACE21 Conference (virtual, June 16–17, 2021) — Diversity in dendrochronology [keynote]
(17) 2020	Frontiers of Science Symposium, Kavli Foundation / NAS (virtual, July 18–21, 2020) — The impact of climate change on wildfires
(16) 2019	AGU Fall Meeting, San Francisco (Dec 9–13, 2019) — Eight hundred years of North Atlantic Jet Stream variability and its influence on European climate extremes
(15) 2019	Creating Nature: Premodern Climate and the Environmental Humanities, Washington DC (May 23–24, 2019) — Shipwrecks, tree rings, and hurricanes
(14) 2019	TRACE19 Conference, Caserta, Italy (May 7–10, 2019) — Reconstructing jet stream and Hadley Cell circulation dynamics
(13) 2018	AGU Fall Meeting, Washington DC — A tree-ring based reconstruction of spring Northern Hemisphere tropical belt movements over the past 800 years
(12) 2018	AMQUA/CANQUA Conference, Ottawa (Aug 7–11, 2018) — Natural drivers of early spring Northern Hemisphere tropical belt movements
(11) 2016	Frontiers of Science Symposium, Kavli Foundation / NAS, Irvine (Nov 3–6, 2016) — Snow, wind, and fire: understanding drivers of past climate variability
(10) 2016	SCOT2K Workshop, Aviemore, UK (Sep 6–7, 2016) — A tree-ring based reconstruction of North Atlantic Jet variability over the last 250 years
(9) 2015	Ecological Society of America Annual Meeting, Baltimore (Aug 10–14, 2015) — A tree-ring perspective on terrestrial climate dynamics
(8) 2015	XYLAREDD 2015 Symposium, Tervuren, Belgium (May 26–29, 2015) — Climatic drivers of tree growth in the miombo woodland of southern Africa
(7) 2014	MTNCLIM 2014 Conference, Midway, UT (Sep 15–18, 2014) — Reconstructing North Pacific Jet variability and its influence on Sierra Nevada fire regimes
(6) 2014	PAGES2K North American Climate Working Group, Fort Collins, CO (Jun 24, 2014) — A 1500-year reconstruction of annual mean temperature for temperate North America
(5) 2014	Center for the Ancient Mediterranean Workshop, Columbia University, NYC (May 17, 2014) — Potential pathways of climatic influence on the late Roman Empire
(4) 2014	9th International Conference on Dendrochronology, Melbourne (Jan 13–17, 2014) — Climate dynamics and European history
(3) 2011	PAGES NAM2K Meeting, Flagstaff, AZ (May 8–10, 2011) — Climate drivers of tree growth in Europe
(2) 2009	Eurodendro, Mallorca (Oct 28, 2009) [keynote] — Developments, advances, and challenges in dendroclimatology
(1) 2009	3rd Milestone Meeting of the Millennium Project, Mallorca (Mar 3, 2009) [keynote] — Persistent positive NAO mode dominated the Medieval Climate Anomaly

Seminars (selected, 62 total)

(62) 2026	Geosciences Department, Union College, Schenectady, NY (Mar 31, 2026)
(61) 2026	University at Buffalo, Orin Foster Environmental Lecture Series (Mar 27, 2026)
(60) 2025	Research Insights in Semiarid Ecosystems (RISE) Symposium, UArizona (Nov 1, 2025)
(59) 2025	Institut Méditerranéen de Biodiversité et d'Ecologie, Aix Marseille Université (Jun 25, 2025)

(58) 2025	Oeschger Centre for Climate Change Research, University of Bern (Jun 2, 2025)
(57) 2024	The Irwin S. Chanin School of Architecture, The Cooper Union, NYC (Oct 15, 2024)
(56) 2024	Pennsylvania State University, Dept. of Geography (Oct 11, 2024)
(55) 2024	Swiss Federal Research Institute WSL — Distinguished Lecture (Sep 17, 2024)
(54) 2024	Royal Flemish Academy of Belgium, Brussels (Apr 18, 2024)
(53) 2024	EU Joint Research Centre, Ispra, IT (Mar 12, 2024)
…	Earlier seminars at Harvard, Rutgers, Cornell, Brown, McGill, Indiana University, USGS, NASA Goddard, Columbia Lamont-Doherty, Georgetown, Czech Academy of Sciences, Vienna BioCenter, and others. Full list available on request.

FIELD CAMPAIGNS

Lead organizer	Tanzania (1998); Zambia (2000, 2002); Sierra Nevada CA (2005, 2006); Bulgaria (2008); Greece (2010, 2015); Turkey (2012); New Mexico (2012); Arizona (2013); Wyoming (2015); Albania (2015)
Participant	Spain (2007); Albania (2008, 2009); Scotland (2009); Russia (2011); Mozambique (2011); Utah & Idaho (2022)

PROFESSIONAL DEVELOPMENT

2016	Expert Witness Training Academy, NSF (Hamlin School of Law, University of Minnesota, Aug 1–5, 2016)
2015, 2023	UN Framework on Climate Change Conferences: COP21, Paris (Dec 2015) and COP28, Dubai (Nov–Dec 2023) — Research and Independent NGO (RINGO) observer

LANGUAGES

Dutch	Mother tongue
English	Excellent (understand, speak, write)
French	Excellent (understand); very good (speak, write)
German	Excellent (understand); good (speak, write)