Supplementary Material

for

Cuapio-Hernández, L., Reyes-Ortiz, J.-L., Borja de la Rosa, A., Pavón, N. P., López-Herrera, M., Villanueva-Díaz, J., Sánchez-González, A., 2023. Is there a response pattern between radial growth of trees and elevation gradient?. *Tree-Ring Research* 79(1):12–26.

Supplementary Material. Studies used to analyze the relationship between radial growth, altitude, and climate. Studies selected for the analysis of the radial growth-altitude relationship (A), radial growth-altitude, in recent decades (B), studies where there was or no relationship between radial growth-altitude (C), radial growth- climate (D), radial growth in different altitudinal floors, where the relationship was statistically significant (E). a: Geographic location of the study area or sampling site; b: Geographic location of the sampling site; c: Geographic location map of the study area; d: It has no geographic location

No.	Year	Journal	Authors	Title	Species	Physiographic region	Climate data period	Period chronology	Section in which it was analyzed in the article
1 a	2000	Annals of Forest Science	B. E. Splechtna, J. Dobrý, K. Klinka	Tree-ring characteristics of subalpine fir (*Abies lasiocarpa* (Hook.) Nutt.) in relation to elevation and climatic fluctuations	*Abies lasiocarpa* (Hook.) Nutt.	Central and southern British Columbia, Canada. Specifically, the montane Sub boreal Spruce and subalpine Engelmann spruce.	1964–1992 1946–1992	1964 – 1992 1946 – 1992	A
2 b	2002	Forest Ecology and Management	H. Mäkinen, P. Nöjd, H-P Kahle, U. Neumann, B. Tveite, K. Mielikäinen, H. Röhle, H. Spiecker	Radial growth variation of Norway spruce (*Picea abies* (L.) Karst.) across latitudinal and altitudinal gradients in central and northern Europe	*Picea abies* (L.) Karst.	The upper Rhine valley to the high altitudes of the southern Black Forest in southwestern Germany. The Ore mountains, Saxon, Switzerland and Zittauer mountains in eastern Germany. The Lifjell mountain in Telemark and relative long belt between the coast and the Swedish border within Nordland county in Helgeland, Norway. From southern Finland to the Arctic spruce timberline in northern Lapland in Finland.	1910–1995	1910 – 1995	C
3 a	2004	Investigación Agraria. Sistemas y Recursos Forestales	V. Rozas	Efectos de la historia del dosel y el clima sobre los patrones de crecimiento radial de *Fagus sylvatica* L. y *Quercus robur* L.	*Fagus sylvatica* L. *Quercus robur* L.	Coastal strip of the West of Cantabria within Oyambre National Park, Spain	1924 – 1996	1925 – 1980	D
4 b	2005	Acta Oecologica International Journal of Ecology	G. Piovesan, F Biondi, M. Bernabei, A. Di Filippo, B. Schirone	Spatial and altitudinal bioclimatic zones of the Italian peninsula identified from a beech (*Fagus sylvatica* L.) tree-ring network	*Fagus sylvatica* L.	Alps, Northern Apennines, Central and Southern in the Italian Peninsula, Italy	1928 – 1995	1928 – 1988	A, D

5 a	2005	Trees	T. Wang, H. Ren, K. Ma	Climatic signals in tree ring of *Picea schrenkiana* along an altitudinal gradient in the central Tianshan Mountains, northwestern China	*Picea schrenkiana* Fisch. et Mey	The central Tianshan Mountains. Tianchi Nature Reserve, Xinjiang Uygur Autonomous Region, China	1961 – 2000	1900 – 2000	A
6 b	2005	Journal of Arid Environments	X. Gou, F. Chen, M. Yang, J. Li, J. Peng, L. Jin	Climatic response of thick leaf spruce (*Picea crassifolia*) tree-ring width at different elevations over Qilian Mountains, northwestern China	*Picea crassifolia* Kom.	The Qilian Mountains (west of Gansu and northeast of Qinghai) China	1959 – 1995	1748 – 2000	C
7 d	2006	Global Change Biology	A. S. Jump, J. M. Hunt, J. Peñuelas	Rapid climate change-related growth decline at the southern range edge of *Fagus sylvatica*	*Fagus sylvatica* L.	Montseny Mountain, Spain	1952 – 2003	1978 – 2003	D, E
8 d	2006	Science in China: Series E Technological Sciences	D. Yu, Q. Wang, G. G. Wang, L. Dai	Dendroclimatic response of *Picea jezoensis* along an altitudinal gradient in Changbai Mountains	*Picea jezoensis* var. *komarovii* (S. et Z.) Carr.	Changbai Mountains Nature Reserve, China	1982 – 2000	1823 – 2002	A, B
9 a	2006	Trees	Y. Savva, J. Oleksyn, P. B. Reich, M. G. Tjoelker, E. A. Vaganov, J. Modrzynski	Interannual growth response of Norway spruce to climate along an altitudinal gradient in the Tatra Mountains, Poland	*Picea abies* [L.] Karst.	Tatra Mountains, Poland	1941 – 1956 1989 – 1991	1764 – 1993	C
10 d	2007	Écoscience	A. S. Jump, J. M. Hunt, J. Peñuelas	Climate relationships of growth and establishment across the altitudinal range of *Fagus sylvatica* in the Montseny Mountains, northeast Spain	*Fagus sylvatica* L.	Montseny Mountain (Turó de I'home and Les Agudes), Spain	1914 – 1964 1953 – 2003	1961 – 2003	C
11 c	2007	Dendrochronologia	S. Du, N. Yamanaka, F. Yamamoto, K. Otsuki, S. Wang, Q. Hou	The effect of climate on radial growth of *Quercus liaotungensis* forest trees in Loess Plateau, China	*Quercus liaotungensis* Koidz	Mount Gonglushan in the central part of the Loess Plateau, China	1952 – 2003	1952 – 2003	C, D, E
12 c	2007	Investigación Agraria: Sistemas y Recursos Forestales	S. Lamas, V. Rozas	Crecimiento radial de las principales especies arbóreas de la isla de Cortegada (Parque Nacional de las Islas Atlánticas) en relación con la historia y el clima	*Quercus robur* L. *Quercus pyrenaica* Willd. *Pinus pinaster* Ait. *Pinus pinea* L. *Laurus nobilis* L.	Isla Cortegada, National Park of the Atlantic Islands of Galicia, Spain	1955 – 2000	1875 – 2000	D
13 b	2007	Journal of Biogeography	A. Di Filippo, F. Biondi, K. Čufar, M. de Luis, M. Grabner, M. Maugeri, E. Presutti Saba, B. Schirone, G. Piovesan	Bioclimatology of beech (*Fagus sylvatica* L.) in the Eastern Alps: spatial and altitudinal climatic signals identified through a tree-ring network	*Fagus sylvatica* L.	Eastern Alps (Carnic Alps, Alps in Austria and Slovenia) in Italy, Slovenia and Austria Julian Alps in Italy and Slovenia, Carnic Alps in Italy and northern Alps in Austria	1942 – 2001	1942 – 2001	A
14 d	2008	Annals of Forest Science	B. Vila, M. Vennetier, C. Ripert, O.	Has global change induced divergent trends in radial growth of *Pinus sylvestris* and *Pinus*	*Pinus halepensis* Mill. *Pinus sylvestris* L.	Sainte-Baume mountain, Bouches-du-Rhône, France	1900 – 2000	1900 – 2000	B

			Chandioux, E. Liang, F. Guibal, F. Torre	*halepensis* at their bioclimatic limit? The example of the Sainte-Baume forest (south-east France)					
15 c	2008	Dendrochronologia	J. Peng, X. Gou, F. Chen, J. Li, P. Liu, Y. Zhang	Altitudinal variability of climate–tree growth relationships along a consistent slope of Anyemaqen Mountains, northeastern Tibetan Plateau	*Sabina przewalskii* Kom.	The central Anyemaqen mountains, northeast of the Tibetan Plateau, China	1960 – 2002	1686 – 2002	C
16 b	2009	Forest Ecology and Management	Z-X. Fan, A. Bräuning, K-F. Cao, S-D. Zhu	Growth–climate responses of high-elevation conifers in the central Hengduan Mountains, southwestern China	*Abies georgei* Orr. *Abies forrestii* Coltm.-Rog. *Picea brachytyla* (Franch.) E.Pritz. *Picea likiangensis* (Franchet) E. Pritzel	The mountain ranges between the Lancang and Jinsha River in the central Hengduan Mountains, Southwest China	1951 – 2002	1850 – 1999	D, E
17 a	2010	European Journal of Forest Research	K. Fang, X. Gou, F. Chen, J. Li, R. D'Arrigo, E. Cook, T. Yang, W. Liu, F. Zhang	Tree growth and time-varying climate response along altitudinal transects in central China	*Abies fabri* Mast. Craib *Picea wilsonii* Mast.	Mount Emei (transition region between the Sichuan Basin and the Eastern Tibetan Plateau, China	1951 – 2006	1838 – 2003	C
18 b	2010	Forest Ecology and Management	Y. Zhang, M. Wilmking	Divergent growth responses and increasing temperature limitation of Qinghai spruce growth along an elevation gradient at the northeast Tibet Plateau	*Picea crassifolia* Kom.	Halihatu Valley, northeast Tibet Plateau, China	1981 – 2005	1954 – 1985 1964 – 1995 1974 – 2005	C
19 a	2010	Forest Ecology and Management	Y-H. Lo, J. A. Blanco, B. Seely, C. Welham, J. P. (Hamish) Kimmins	Relationships between climate and tree radial growth in interior British Columbia, Canada	*Pinus contorta* Dougl. var. *latifolia* *P. menzien*sii (Mirb.) Franco var. *glauca* *P. glauca engelmannii*	Tolko Industries Ltd. Tree Farm License 49 (TFL 49) in the Okanagan Valley, near Kelowna, British Columbia, Canada	1922 – 1997	1778 – 2003	C, D, E
20 a	2010	Journal of Arid Environments	G. Nicolini, V. Tarchiani, M. Saurer, P. Cherubini	Wood-growth zones in Acacia seyal Delile in the Keita Valley, Niger: Is there any climatic signal?	*Acacia seyal* Delile	Keita Valley in part of the Tahoua region in the center of the Republic of Nigeria	1993 – 2003	1993 – 2003	D
21 a	2010	Trees	C. Maxime, D. Hendrik	Effects of climate on diameter growth of co-occurring *Fagus sylvatica* and *Abies alba* along an altitudinal gradient	*Abies alba* Mill. *Fagus sylvatica* L.	Mount Ventoux a calcareous mountain located in the southwestern Alps, France	1964 – 2006	1964 – 2006	A
22 b	2011	Trees	L. Chen, S. Wu, T. Pan	Variability of climate –growth relationships along an elevation gradient in the Changbai Mountain, northeastern China	*Larix olgensis* A. Henry	North slope of Changbai Mountain in Changbai Nature Reserve, east of Jilin Province, China	1958 – 2002	1958 – 2002	C
23 b	2011	Forest Ecology and Management	G. Gea-Izquierdo, P. Cherubini, I. Cañellas	Tree-rings reflect the impact of climate change on *Quercus ilex* L. along a temperature gradient in Spain over the last 100 years	*Quercus ilex L.*	Western Spain	1900 – 2004	1831 – 2008	C

24 a	2011	Canadian Journal of Forest Research	E. Toromani, M. Sanxhaku, E. Pasho	Growth responses to climate and drought in silver fir (*Abies alba*) along an altitudinal gradient in southern Kosovo	*Abies alba* Mill.	Koritnik mountain south of Kosovo	1951 – 2008	1897 – 2008	C
25 b	2011	Tree-Ring Research	P. B. White, S. L. Van de Gevel, H. D. Grissino-Mayer, L. B. Laforest y G. G. Deweese	Climatic response of oak species across an environmental gradient in the southern Appalachian Mountains, USA	*Quercus alba* L. *Q. coccinea* Muenchh. *Q. marilandica* Muenchh. *Q. montana* Willd. *Q. rubra* L. *Q. velutina* Lam.	Southern Appalachian Mountains, Virginia and Tennessee, United States	1930 – 2007	1836 – 2005	C
26 a	2011	Dendrochronologia	T. Aakala, T. Kuuluvainen	Summer droughts depress radial growth of *Picea abies* in pristine taiga of the Arkhangelsk province, northwestern Russia	*Picea abies* [L.] Karst.	The southern part of a large forest massif between Dvina and Pinega rivers in the Arkhangelsk Province, Northwestern Russia	1913 – 1999	1913 – 1999	D
27 a	2011	Biotropica	L. López, R. Villalba	Climate influences on the radial growth of *Centrolobium microchaete*, a valuable timber species from the tropical dry forests in Bolivia	*Centrolobium microchaete* (Mart. ex Benth.) H.C. Lima	The Cerrado biogeographical province in South America in the localities of Concepción and Santa Mónica, located in the Chiquitos and Guarayos districts, Bolivia	1943 – 2005	1943 – 2005	D
28 d	2011	Annals of Forest Science	D. Yu, Q. Wang, Y. Wang, W. Zhou, H. Ding, X. Fang, S. Jiang, L. Dai	Climate effects on radial growth of major tree species on Changbai Mountain	*Pinus koraiensis* Sieb. Et Zucc. *Fraximus mandshurica* Rupr. *Abies nephrolepis* (Trautv.) Maxim) *Picea koraiensis* *Larix olgensis* A. Henry *Betula ermanii* Cham.	Changbai Mountains Nature Reserve in Northeast China	1900 – 2000	1902 – 2000	A, D, E
29 b	2012	Forest Ecology and Management	D. Candel-Pérez, J. C. Linares, B. Viñegla, M. E. Lucas-Borja	Assessing climate –growth relationships under contrasting stands of co-occurring Iberian pines along an altitudinal gradient	*Pinus pinaster* Ait. *P. nigra* Arnold *P. sylvestris* L.	Cuenca mountain range, central - eastern Spain	1908 – 2010	1950 – 2010	C
30 c	2012	Trees	Z. S. Li, G. H. Liu, B. J. Fu, C. J. Hu, S. Z. Luo, X. L. Liu, F. He	Anomalous temperature –growth response of *Abies faxoniana* to sustained freezing stress along elevational gradients in China's Western Sichuan Province	*Abies faxoniana* Rehd. et Wild	Mount Balang in the core area of the Wolong Nature Reserve, western Sichuan province, China	1956 – 2002	1925 – 2008	C
31 a	2012	Annals of Forest Science	M. van der Maaten-Theunissen, H-P. Kahle, E. van der Maaten	Drought sensitivity of Norway spruce is higher than that of silver fir along an altitudinal gradient in southwestern Germany	*Abies alba* Mill. *Picea abies* (L.) Karst.	Black forest in southwestern Germany	1974 – 2006	1974 – 2006	C

32 b	2012	Forest Ecology and Management	W-t. Zhang, Y. Jiang, M-y. Dong, M-y. Kang, H-c. Yang	Relationship between the radial growth of *Picea meyeri* and climate along elevations of the Luyashan Mountain in North-Central China	*Picea meyeri* Rehder & E.H.Wilson	Luyashan Mountains, Shanxi Province, China	1978 – 2007	1978 – 2007	C
33 d	2012	Dendrochronologia	C. Dittmar, T. Eißing, A. Rothe	Elevation-specific tree -ring chronologies of Norway spruce and Silver fir in Southern Germany	*Abies alba* Mill. *Picea abies* [L.] Karst.	Central part of the Bavarian Alps and Northeast Baden – Württemberg in Southern Germany	–	866 – 1910 892 – 1911	A
34 b	2013	Dendrochronologia	M. Pompa-García, J. Cerano-Paredes, P. Z. Fulé	Variation in radial growth of *Pinus cooperi* in response to climatic signals across an elevational gradient	*Pinus cooperi* Blanco	Sierra Madre Occidental in northeast Durango, Mexico	1947 – 2010	1946 – 2010	C
35 c	2013	Climate Research	V. Rozas, I. García-González, G. Pérez-de-Lis, J. R. Arévalo	Local and large-scale climatic factors controlling tree-ring growth of *Pinus canariensis* on an oceanic island	*Pinus canariensis* Sweet	Cordillera Dorsal of Tenerife, Tenerife Island belonging to the Canary Islands, Spain	1967 − 2006	1967 − 2006	C
36 a	2013	Forest Ecology and Management	A. Herrero, A. Rigling, R. Zamora	Varying climate sensitivity at the dry distribution edge of *Pinus sylvestris* and *P. nigra*	*Pinus sylvestris* L. *P. nigra* Arnold	Sierra de Baza Natural Park, southeastern Spain	1920 – 2007	1920 – 2007 1935 – 2007	C, D
37 a	2013	New Phytologist	J. M. Olano, A. Arzac, A. I. García-Cervigón, G. von Arx, V. Rozas	New star on the stage: amount of ray parenchyma in tree rings shows a link to climate	*Juniperus thurifera* L.	Sierra de Cabrejas east of the city of Soria in north-central Spain	1965 – 2004	1965 – 2004	D
38 b	2013	Forest Ecology and Management	H. Wang, X-m Shao, Y. Jiang, X-q. Fang, S-h. Wu	The impacts of climate change on the radial growth of *Pinus koraiensis* along elevations of Changbai Mountain in northeastern China	*Pinus koraiensis* Siebold & Zucc.	North Slope of Changbai Mountain Nature Reserve in northeastern China	1959 – 2007 1959 – 2002	1911 – 2006 1851 – 2002 1865 – 2007	C, D, E
39 b	2013	Trees	L. Gao, X. Gou, Y. Deng, W. Liu, M. Yang, Z. Zhao	Climate –growth analysis of Qilian juniper across an altitudinal gradient in the central Qilian Mountains, northwest China	*Juniperus przewalskii* Kom.	Central part of the Qilian Mountains in northwest China	1957 – 2007	1957 – 2007	A
40 b	2013	Trees	M. He, B. Yang, A. Bräuning	Tree growth–climate relationships of *Juniperus tibetica* along an altitudinal gradient on the southern Tibetan Plateau	*Juniperus tibetica* Kom.	Suoxin and Jiali counties Naqu region, southern Tibetan Plateau, China	1961 – 2010	1961 – 2010	A
41 a	2013	Oecologia	G. M. King, F. Gugerli, P. Fonti, D. C. Frank	Tree growth response along an elevational gradient: climate or genetics?	*Larix decidua* Mill. *Picea abies* (L.) Karst.	The Lötschental an inner-alpine valley located in the central Swiss Alps, Switzerland	1876 – 2007	1876 – 2007	A
42 b	2013	Dendrochronologia	J. Liu, C. Qin, S. Kang	Growth response of *Sabina tibetica* to climate factors along an elevation gradient in south Tibet	*Sabina tibetica* Kom.	The Namling region, south Tibet between the eastern Gangdese and the Nyainqentanglha Mountains, China.	1956 – 2002	1810 – 2010	A

43 a	2014	Forest Ecology and Management	D. Castagneri, P. Nola, R. Motta, M. Carrer	Summer climate variability over the last 250 years differently affected tree species radial growth in a mesic *Fagus–Abies–Picea* old-growth forest	*Fagus sylvatica* L. *Picea abies* (L.) Karst. *Abies alba* Mill.	Lom Forest Reserve in the Dinaric alps, Bosnia and Herzegovina	1753 – 2008	1650 – 2008 1700 – 2008 1720 – 2009	D
44 d	2014	Environmental Research Letters	C. Dumais, P. Ropars, M-P. Denis, G. Dufour-Tremblay, S. Boudreau	Are low altitude alpine tundra ecosystems under threat? A case study from the Parc National de la Gaspésie, Québec.	*Betula glandulosa* Michx.	Mont de la Passe mountain in the Parc National de la Gaspésie in the center of the Gaspésie peninsula, southeastern Québec, Canada	1940 – 2008 1963 – 1998	1940 – 2008 1963 – 1998	D, E
45 b	2014	PlosOne	Y. Jiang, W. Zhang, M. Wang, M. Kang, M. Dong	Radial growth of two dominant montane conifer tree species in response to climate change in North-Central China	*Picea meyeri* Rehder & E.H.Wilson *Larix principis-rupprechtii* Mayr	Luyashan Mountains, Shanxi Province, China	1977 – 2007	1897 – 2007	D, E
46 b	2014	Dendrochronologia	T. Zhang, Y. Yuan, Q. He, W. Wei, M. Diushen, H. Shang, R. Zhang	Development of tree-ring width chronologies and tree-growth response to climate in the mountains surrounding the Issyk-Kul Lake, Central Asia	*Picea schrenkiana* Fisch. & Camey.	The mountains surrounding the Issyk-Kul Lake, Northeast Kyrgyzstan, Central Asia	1950 – 2009	1900 – 1999	D, E
47 b	2014	PlosOne	Y. Jiang, W. Zhang, M. Wang, M. Kang, M. Dong	Radial growth of two dominant montane conifer tree species in response to climate change in North-Central China	*Picea meyeri* Rehder & E.H.Wilson *Larix principis-rupprechtii* Mayr	Luyashan Mountains, Shanxi Province, China	1977 – 2007	1897 – 2007	B
48 b	2014	Trees	C. Hartl-Meier, C. Dittmar, C. Zang, A. Rothe	Mountain forest growth response to climate change in the Northern Limestone Alps	*Picea abies* (L.) Karst. *Abies alba* Mill. *Larix decidua* Mill. *Fagus sylvatica* L.	Berchtesgaden National Park and the surrounding districts north of the Limestone alps and southeastern Germany	1959 – 2008	1959 – 2008	A
49 b	2014	Banko Janakari A Journal of Forestry Information for Nepal	D. K. Kharal, H. Meilby, S. Rayamajhi, D. Bhuju, U. K. Thapa	Tree ring variability and climate response of *Abies spectabilis* along an elevation gradient in Mustang, Nepal	*Abies spectabilis* D. Don	Mustang district between the great Himalayan ranges, Annapurna Himalaya in the east and Dhaulagiri in the west, Nepal.	1961 – 2012 1964 – 2009 1961 – 2010 1941 – 2012		C
50 a	2015	Forest Ecology and Management	C. Álvarez, T. T. Veblen, D. A. Christie, Á. González-Reyes	Relationships between climate variability and radial growth of *Nothofagus pumilio* near altitudinal treeline in the Andes of northern Patagonia, Chile	*Nothofagus pumilio* (Poepp. et Endl.) Krasser	Northwest side of the Choshuenco volcano, in the Chilean Andes, Chile	1957 – 2010 1954 – 2009	1768 – 2010	D
51 b	2015	Investigaciones Geográficas, Boletín del Instituto de Geografía, UNAM	J. Marlès Magre, T. Valor Ivars, B. Claramunt López, D. R. Pérez Salicrup, R. Maneja Zaragoza, S.	Análisis dendroclimático de *Pinus pseudostrobus* y *Pinus devoniana* en los municipios de Áporo y Zitácuaro (Michoacán), Reserva de la Biósfera de la Mariposa Monarca.	*Pinus pseudostrobus* Lindl., *Pinus devoniana* Lind.	Sierra Chincúa in Áporo and west of Cerró Pelón in Zitácuaro, Michoacán Mexico.	1966 – 2006 1952 – 2010	1949 – 2010 1925 – 2010	D

			Sánchez Mateo, M. Boada Juncà						
52 b	2015	Trees	C. G. Sidor, I. Popa, R. Vlad, P. Cherubini	Different tree-ring responses of Norway spruce to air temperature across an altitudinal gradient in the Eastern Carpathians (Romania)	*Picea abies* (L.) Karst.	Eastern Carpathians, Romania	1901 – 2000	1901 – 2000	C
53 b	2015	Frontiers in Plant Science	G. Wu, X. Liu, T. Chen, G. Xu, W. Wang, X. Zeng, X. Zhang	Elevation-dependent variations of tree growth and intrinsic water-use efficiency in Schrenk spruce (*Picea schrenkiana*) in the western Tianshan Mountains, China	*Picea schrenkiana* Fisch. & CA Mey.	North slope of Wusun Mountain in the Yili Valley, located in the west of the Tianshan Mountains in northwestern China	1960 – 2010	1960 – 2010	B
54 a	2016	PlosOne	L. Lyu, X. Deng, Q-B. Zhang	Elevation pattern in growth coherency on the southeastern Tibetan Plateau	*Picea likiangensis* var. *balfouriana* (Rehd. etWils.) Hillier ex Slsvin	Buze Mountain and Yela Mountain, Basu County southeast of the Tibetan Plateau, China	1978 – 2014	1565 – 2010	C
55 a	2016	Forest Ecology and Management	L. Marqués, J. J. Camarero, A. Gazol, M. A. Zavala	Drought impacts on tree growth of two pine species along an altitudinal gradient and their use as early-warning signals of potential shifts in tree species distributions	*Pinus sylvestris* L. *Pinus nigra* Arn. subsp *salzmannii* (Dunal) Franco	Sierra de Gúdar within the southern Iberian Sierra (Teruel, Aragon, eastern Spain) Spain	1950 – 2014	1950 – 2014	C
56 b	2016	Dendrochronologia	L. Jiao, Y. Jiang, M. Wang, X. Kang, W. Zhang, L. Zhang, S. Zhao	Responses to climate change in radial growth of *Picea schrenkiana* along elevations of the eastern Tianshan Mountains, northwest China.	*Picea schrenkiana* Fisch. & CA Mey.	North side of the eastern mountains of Tianshan, northwest China	1960 – 2012	1960 – 2012	B, D, E
57 a	2016	Polish Journal of Ecology	L. Zhang, Y. Jiang, S. Zhao, M. Dong, H. Y.H. Chen, X. Kang	Different responses of the radial growth of conifer species to increasing temperature along altitude gradient: *Pinus tabulaeformis* in the Helan Mountains (Northwestern China)	*Pinus tabuliformis* Carr.	Eastern slope of the Helan Mountains in northwest China	1954 – 2010	1950 – 2010	B
58 a	2016	Journal of Climatology & Weather Forecasting	T. T. Belay	Climate-growth Relationship of Pinus patula Schldl. et Cham. in Wondo Genet, South Central Ethiopia	*Pinus patula* Schldl. et Cham.	Wondo Genet, Sidama Zone of Southern Nations Nationality and Peoples Regional States, south central Ethiopia, Africa.	1983 – 2012	1980 – 2012	D
59 a	2016	Trees	T. Ponocná, B. Spyt, R. Kaczka, U. Büntgen, V. Treml	Growth trends and climate responses of Norway spruce along elevational gradients in East-Central Europe	*Picea abies* (L.) Karst.	The mountainous area (crystalline mountains of the Sudetes and flysch areas of the western Carpathians) in east-central Europe (Czech Republic Slovakia Poland)	1906 – 2010	1906 – 2010	A
60 b	2016	International Journal of Climatology	K. Sohar, J. Altman, E. Lehečková, J. Doležal	Growth–climate relationships of Himalayan conifers along elevational and latitudinal gradients	*Juniperus semiglobosa* Regel *Abies pindrow* Royle *Picea smithiana* Boiss.	The Bhaga valley of the Great Himalaya and Kullu valley of the Pir Panjal Range in the NW Himalayas, North India	1902 – 2012	1775 – 2013	A

					Cedrus deodara (Roxb.) G. Don.				
61 b	2017	IEEA '17: Proceedings of the 6th International Conference on Informatics, Environment, Energy and Applications	T. Zehao, B. Hongying, S. Kai, D. Yuan	Reconstruction and response of tree-ring width chronology at various altitudes to climate change on Taibai Mountain	*Larix chinensis* Beissn.	Taibai Mountain, western China	1959 – 2013	1820 – 2015	D, E
62 d	2017	Agricultural and Forest Meteorology	T. Kolář, P. Čermákc, M. Trnka, T. Žid, M. Rybníček	Temporal changes in the climate sensitivity of Norway spruce and European beech along an elevation gradient in Central Europe	*Picea abies* (L.) Karst. *Fagus sylvatica* L.	Eastern part of the Czech Republic (Moravia and Silesia) Czech Republic	1962 – 2013	1962 – 2013	C
63 b	2017	Forest Ecology and Management	A. Latreille, H. Davi, F. Huard, C. Pichot	Variability of the climate-radial growth relationship among *Abies alba* trees and populations along altitudinal gradients	*Abies alba* Mill.	Mont Ventoux close to the Rhône valley and Issole in southeastern France	1960 – 2011	1960 – 2011	C
64 b	2017	Dendrochronologia	R. Cătălin-Constantin, I. Popa, A. J. Kirchhefer, C. Palaghianu	Growth responses to climate in a tree-ring network of European beech (*Fagus sylvatica* L.) from the eastern limit of its natural distribution area	*Fagus sylvatica* L.	Three environmental zones: the cool, moist Alpine South; the Continental and the dry Pannonian zone in Romania	1901 – 2005	1901 – 2005	A
65 c	2017	Global Change Biology	V. Vitali, U. Büntgen, J. Bauhus	Silver fir and Douglas fir are more tolerant to extreme droughts than Norway spruce in south-western Germany	*Abies alba* Mill. *Pseudotsuga menziesii* Mirb	Western slopes of the southern and central Black Forest in south-western Germany	1960 – 2014	1970 – 2014	A, B
66 a	2018	Ecología Austral	M. G. Lanza, M. P. Chartier, P. I. Marcora	Relación clima-crecimiento radial de *Polylepis australis* en un gradiente altitudinal en las Sierras Grandes de Córdoba, Argentina	*Polylepis australis* Bitter	Basins of the Tabaquillo and El Durazno rivers on the eastern slope of the Sierras Grandes de Córdoba, Argentina	1994 – 2013	1994 – 2013	D, E
67 a	2018	Global and Planetary Change	M. Rahman, M. Islam, A. Bräuning	Tree radial growth is projected to decline in South Asian moist forest trees under climate change	*Chukrasia tabularis* A. Juss *Toona ciliata* M. Roem. *Lagerstroemia speciosa* (L.) Pers.	Chonbari and Kalenga Forest Reserve in the Sylhet Hills, a bio-ecological zone of Northeastern Bangladesh	1950 – 2015	1895 – 2015 1930 – 2015 1912 – 2015	D
68 b	2018	Dendrochronologia	S. Panthi, A. Bräuning, Z-K, Zhou, Z-X. Fan	Growth response of *Abies georgei* to climate increases with elevation in the central Hengduan Mountains, southwestern China	*Abies georgei* Orr.	Baima Snow and Shika Snow Mountains, south-western China	1954 – 2015	1901 – 2015	A
69 c	2019	Agricultural and Forest Meteorology	J. Björklund, M. Rydval, J. S. Schurman, K. Seftigen, V. Trotsiuk, P. Janda, M. Mikoláš, M. Dušátko, V.	Disentangling the multi-faceted growth patterns of primary *Picea abies* forests in the Carpathian arc	*Picea abies* (L.) Karst.	Carpathian Arch in Slovakia, Ukraine, and northern and southern Romania (Slovakia, Ukraine, Romania)	1981 – 2010	1901 – 2010	D, E

			Čada, R. Bače, M. Svoboda						
70 a	2019	Revista Mexicana de Biodiversidad	G. Gutiérrez-García, M. Ricker	Influencia del clima en el crecimiento radial en cuatro especies de coníferas en la sierra de San Antonio Peña Nevada (Nuevo León, México)	*Abies vejarii* Martínez *Pinus hartwegii* Lindl. *Pinus strobiformis* Engelm. *Pinus teocote* Schltdl. et Cham.	Ejido La Encantada in the Sierra San Antonio Peña Nevada located in the southeast of the state of Nuevo León, Mexico	1950 – 2000	1881 – 2000 1895 – 2000 1902 – 2000 1897 – 2000	D
71 b	2019	Forest Ecology and Management	L. Jiao, Y. Jiang, W. Zhang, M. Wang, S. Wang, X. Liu	Assessing the stability of radial growth responses to climate change by two dominant conifer trees species in the Tianshan Mountains, northwest China	*Larix sibirica* Ledeb. *Picea schrenkiana* Fisch. & Camey.	North eastern slope of the Tianshan Mountains in northwestern China	1960 – 2012	1761 – 2012 1735 – 2012	D
72 b	2019	Central European Forestry Journal	V. Šimůnek, Z. Vacek, S. Vacek, I. Králíček, K. Vančura	Growth variability of European beech (*Fagus sylvatica* L.) natural forests: Dendroclimatic study from Krkonoše National Park	*Fagus sylvatica* L.	Boberská stráň located east of the Krkonoše National Park near the town Žacléř near the border with Poland, Czech Republic	1976 – 2017	1976 – 2017	D, E
73 a	2019	Science of the Total Environment	X. Bai, X. Zhang, J. Li, X. Duan, Y. Jin, Z. Chen	Altitudinal disparity in growth of Dahurian larch (*Larix gmelinii* Rupr.) in response to recent climate change in northeast China	*Larix gmelinii* Rupr.	Great Xing'an Mountains in Northeast China	1960 – 2008	1960 – 2008	B, D, E
74 d	2019	Climatic Change	J. Peng, J. Li, T. Wang, J. Huo, L. Yang	Effect of altitude on climate – growth relationships of Chinese white pine (*Pinus armandii*) in the northern Funiu Mountain, central China	*Pinus armandii* Franch.	Baiyunshan National Nature Reserve on the northern slope of Funiu Mountain west of Henan Province, China	1957 – 2013	1980 – 2012 1975 – 2014 1975 – 2014	C
75 a	2020	Forest Ecosystems	N. M. Devi, V. V. Kukarskih, A. A. Galimova, V. S. Mazepa, A. A. Grigoriev	Climate change evidence in tree growth and stand productivity at the upper treeline ecotone in the Polar Ural Mountains	*Larix sibirica* Ledeb. *Picea obovata* Ledeb.	The western slope of the mountain Slantsevaya, close to Sob River basin, an eastern slope of the Polar Ural Mountains in Russia.	1892 – 2015	1985 – 2015 1955 – 2015 1925 – 2015 1895 – 2015	C
76 b	2020	Journal of Forest Research	S. Rai, B. Dawadi, Y. Wang, X. Lu, H. Ru, S. R. Sigdel	Growth response of *Abies spectabilis* to climate along an elevation gradient of the Manang valley in the central Himalayas	*Abies spectabilis* (D. Don) Mirb.	Manang Valley, Central Himalayas, Nepal	1977 – 2013	1930 – 2013	C
77 c	2020	Forests	L. Sun, Y. Cai, Y. Zhou, S. Shi, Y. Zhao, B. E. Gunnarson, F. Jaramillo	Radial growth responses to climate of *Pinus yunnanensis* at low elevations of the Hengduan Mountains, China	*Pinus yunnanensis* Franch.	Valleys of the southern Hengduan Mountains region, China	1979 – 2016	1979 – 2016	C
78 b	2020	Forests	S. Rakthai. P-L. Fu, Z-X. Fan, N. P. Gaire, N. Pumijumnong, W. Eiadthong, S. Tangmitcharoen	Increased drought sensitivity results in a declining tree growth of *Pinus latteri* in Northeastern Thailand	*Pinus latteri* Mason	Ban Watchan, Khong Jiam and Nong Koo regions in Northwest and Northeast Thailand	1951 – 2017	1951 – 2017	D, E

79 c	2020	Forestist	B. Yaman, N. Köse, H. B. Özel, E. A. Şahan	The effect of climate on the radial growth of Oriental Beech in the Southern limit of its distribution area	*Fagus orientalis* Lipsky	Topaktaş Plateau, Dörtyol, Hatay, Turkey	1960 – 2010	1961 – 2013	C