

Curriculum vitae

Dr. rer. nat. E.C.D. (Ernst) van der Maaten



Contact information

Work address

TU Dresden

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Personal Details

Date of birth: 9th of May, 1985

Place of birth: Epe, the Netherlands

Nationality: Dutch

Working experience

- since 03/2018 **Senior scientist** and **head of DendroLab**, Chair of Forest Growth and Woody Biomass Production, TU Dresden, Germany.
- 05/2013–02/2018 **Post-doctoral researcher** in forest ecology, Landscape Ecology and Ecosystem Dynamics Group, University of Greifswald, Germany.
- 05/2013–12/2015 **Post-doctoral researcher** within the Helmholtz Virtual Institute ICLEA ('Integrated Climate and Landscape Evolution Analyses').
- 05/2009–04/2013 **Research employee** within the 7th Framework Programme 'MODELS for adaptive forest management' (MOTIVE), Chair of Forest Growth, University of Freiburg, Germany.
- 09/2008–04/2009 **Research employee** tri-national research collaboration Nancy-Freiburg-Zürich, Chair of Forest Growth, University of Freiburg, Germany.

Education

- 09/2008–01/2013 *Ph.D.*, Chair of Forest Growth, University of Freiburg, Germany.
Promotor: Prof. H. Spiecker & co-promotor: Prof. H. Rennenberg.
- 09/2006–08/2008 *M.Sc. double-degree: Forest & Nature Conservation*, Wageningen University, the Netherlands / *European Forestry*, University of Joensuu, Finland.
- 09/2003–08/2006 *B.Sc. Forest & Nature Conservation*, Wageningen University, the Netherlands.

Awards

- 12/2021 *Teaching Prize* (1k Euro) for extraordinary commitment in teaching; awarded by the board of the Society of Friends and Supporters of TU Dresden (GFF) and the Vice-Rector for Education.

Publications

Google Scholar statistics (29.01.2025): citations = 3,616, *h*-index = 29, i10-index = 44.

Find a list of my journal publications at the end of this CV.

Grants / Raised funding

- 2024 *Research grant* of the FNR ‘Nachhaltige Erneuerbare Ressourcen’ to the collaborative research project ‘*Fagus orientalis* as alternative tree species under climate change – identification of high-quality seed sources based on genetic and phenotypic characterization (ORIENT-BUCHE)’ (12/2024–11/2027; total funding: 2.2m Euro, own share: 265T Euro); PI.
- 2022 *Research grant* of the FNR ‘Waldklimafonds’ to the collaborative research project ‘Research focus genetics and dendroecology of European beech – drought stress, in-vitro culture and genomics (BucheTIG)’ (02/2022–03/2025; total funding: 2.2m Euro, own share: 354T Euro); PI.
- 2019 *Financial support* of the Eva Mayr-Stihl Stiftung to organize an excursion with B.Sc. forestry students of TU Dresden and Wageningen University on ‘Rotbuche und Klimawandel – eine Exkursion mit internationalem Erfahrungsaustausch’ (4.6k Euro).
- 2016 *Scholarship* of the German Scientific Exchange Service ‘DAAD’ to attend AmeriDendro 2016 in Mendoza, Argentina (2.2k Euro).
- 2014 *Invited participant* to COST Strategic Event ‘A scientific roadmap for projections of global change impacts on forests’, Sarajevo, Bosnia and Herzegovina; grant of COST Office (1k Euro).
- 2011 *Short-term scientific mission* (STSM) to Wageningen University; grant of COST Action ECHOES (2.2k Euro).

2010 **Meeting support** to organize an international Ph.D. training school ‘Impacts of climate change on growth and mortality of forests in Europe’. Proposal submitted as local organizer to, and granted by COST Action ECHOES (12k Euro).

Academic self-administration and services

Current activities:

President *Association for Tree-Ring Research*, since 05/2022.

Editor *Trees - Structure and Function*, since 11/2016.
Frontiers in Forests and Global Change - Temperate and Boreal Forests, since 11/2018.

Commissioner Member of the Study Commission for B.Sc./M.Sc. studies ‘Forest Sciences’, TU Dresden, since 09/2020.

Reviewer For the following ISI-listed journals:
Agricultural and Forest Meteorology – Agronomy Research – Annals of Forest Science – Canadian Journal of Forest Research – Climatic Change – Climatic Research – Dendrochronologia – European Journal of Forest Research – Flora – Forest Ecology and Management – Forest Ecology, Landscape Research and Nature Conservation – Forestry – Forests – iForest – International Journal of Biometeorology – Journal of Biogeography – New Forests – Scientific Reports – Trees – Tree-Ring Research – Quaternary International.

Former activities:

Examiner *Ph.D. theses:*
Neycken, A.J.M. (2024). The 2018 drought and European beech dieback: A dendroecological analysis of predisposition factors and recovery patterns. ETH Zürich, Switzerland.
Power, C.C. (2023). A Greener Greenland? Assessing Arctic shrub dynamics using dendroecology. Aarhus University, Denmark.
Tumajer, J. (2018). Quantitative vessel parameters of broadleaves as a tool for reconstruction of physical geographical processes. Charles University Prague, Czech Republic.

Treasurer *Association for Tree-Ring Research*, 04/2018 – 05/2022.

Commissioner Member of the Search Committee for the ‘Chair of / Junior Professorship for Geosensor Systems’ (W2 / W1), TU Dresden, 05/2020 – 01/2021.

Board member Early-Career Scientist Commissioner of the *Association for Tree-Ring Research*, 05/2016 – 04/2018.

Council member Representative ‘Scientific staff’, Council of the Institute of Botany and Landscape Ecology, University of Greifswald, 2013 – 2018.

Teaching

At TU Dresden, I am/was involved in the B.Sc./M.Sc. courses listed below. My teaching load is 8 SWS.

- ◇ *Analyse und ökonomische Bewertung der Holzproduktion von Waldbeständen* (B.Sc.), 2018 – 2019
- ◇ *Komplexekursion Westdeutschland und die Niederlande* (B.Sc.), since 2019*
- ◇ *Waldwachstum und Umwelt* (B.Sc.), since 2020
- ◇ *Wissenschaftliches Arbeiten* (B.Sc.), since 2024
- ◇ *Assessment and Evaluation of Forest Resources* (M.Sc.), since 2018
- ◇ *Dendroecology* (M.Sc.), since 2018*
- ◇ *Forest Dynamics and Global Change* (M.Sc.), since 2018*

At the University of Greifswald, I have been a lecturer in the B.Sc./M.Sc. courses listed below. My teaching load was 4 SWS.

- ◇ *Botanisches Geländepraktikum* (B.Sc.), 2013 – 2016*
- ◇ *Kulturlandschaftsgeschichte** (B.Sc.), 2013 – 2018
- ◇ *Landschaftsökologische Exkursion* (B.Sc.), 2013 – 2017
- ◇ *Naturräume Nordostdeutschlands* (B.Sc.), 2014 – 2017
- ◇ *Statistik für Landschaftsökologen* (B.Sc.), 2016 – 2018*
- ◇ *Vegetationskunde* (B.Sc.), 2013 – 2017
- ◇ *Waldbau* (B.Sc.), 2016 – 2017
- ◇ *Climate Change and Ecosystem Dynamics* (M.Sc.), 2013 – 2015
- ◇ *Dendrochronology and -ecology* (M.Sc.), 2013 – 2017*

*Coordinator

Supervision

Ph.D. students

4 ongoing, 4 finished theses:

- | | |
|-----------------------|---|
| <i>co-supervision</i> | Kormann, J. (2024). Growth and climate sensitivity of Northern red oak (<i>Quercus rubra</i> L.) provenances in Central Europe. Ph.D. thesis, TU Dresden, Germany. |
| <i>co-supervision</i> | Liepe, K. (2024). Re-utilizing forest genetic trials to inform reforestation during a time of rapid climate change. Ph.D. thesis, TU Dresden, Germany. |
| <i>co-supervision</i> | Stolz, J. (2024). Growth, vitality and stability: Spatio-temporal responses of European beech and Scots pine to climate change. Ph.D. thesis, TU Dresden, Germany. |
| <i>co-supervision</i> | Weigel, R. (2019). The ecological and biogeochemical importance of snow cover for temperate forest ecosystems. Ph.D. thesis, University of Greifswald, Germany. |

M.Sc. students*12 finished theses:*

Dockweiler, N. & Hasenauer, C.V. (2024). Wuchsleistung und Klimasensitivität der Gelb-Kiefer und Dreh-Kiefer im Vergleich zur heimischen Wald-Kiefer und Gemeinen Fichte im Thüringen Forstamt Bad Berka. M.Sc. thesis, TU Dresden.

Weise, K. (2024). Climate sensitivity of sweet chestnut (*Castanea sativa* Mill.) along a gradient of soil water availability in Rhineland-Palatinate, Germany. M.Sc. thesis, TU Dresden.

Wehnert, T. (2023). Analyse der Entwicklung und Dynamik von Buchenwäldern (*Fagus sylvatica* L.) auf Naturwaldreferenzflächen in Serrahn (Müritznationalpark, Deutschland) - Untersuchung der Waldstruktur. M.Sc. thesis, TU Dresden.

Husna, A. (2023). Multispecies tree-ring based streamflow reconstruction in Parvati valley, Western Himalaya. M.Sc. thesis, TU Dresden, Germany.

Dreier, M. (2022). Wachstumskundlicher Vergleich der Baumarten *Pinus sylvestris* und *Betula pendula* im Rein- und Mischbestand auf einem Endmoränenstandort. M.Sc. thesis, TU Dresden.

Bloß, K. & Porsch, C. (2021). Abnahme der Dürre-Sensitivität von Waldkiefer (*Pinus sylvestris*) auf historischen Meilerrelikten in der Oberlausitz (Sachsen) - Dendrochronologische Untersuchungen zu Klima-Wachstums-beziehungen und Weiserjahren. M.Sc. thesis, TU Dresden, Germany.

Essl, L. (2020). Unterscheidet sich die Wuchsdynamik und Klimasensitivität von früh- und spätaustreibenden Rotbuchen? – eine dendroökologische Analyse im Müritznationalpark. M.Sc. thesis, TU Dresden, Germany.

Kalanke, H. (2019). Drought sensitivity of Scots pine (*Pinus sylvestris* L.) along a precipitation gradient in Mecklenburg-West Pomerania. M.Sc. thesis, TU Dresden, Germany.

Schmeddes, J. (2018). Dendrochronological analysis of different tree species from a tropical dry forest in Guanacaste, NW Costa Rica. M.Sc. thesis, University of Greifswald, Germany.

Pape, J. (2016). Impact of weather and climate variability on growth of three coexisting broadleaved tree species in Eldena forest. M.Sc. thesis, University of Greifswald, Germany.

Cole, J. (2015). Using wood density to investigate growth divergence in white spruce from the Brooks Range, Alaska. M.Sc. thesis, University of Greifswald, Germany.

Bergsma, A. (2011). Impact of climate change on European forest growing stock volumes. M.Sc. thesis, Wageningen University and Research Centre, the Netherlands.

B.Sc. students*18 finished theses:*

Heidler, J. & Ullrich, L. (2024). Intraspezifische Variation der Klimasensitivität der Rotbuche (*Fagus sylvatica* (L.)) entlang eines Klimagradienten in Deutschland. B.Sc. thesis, TU Dresden, Germany.

- Morawetz, L. (2024). Klimasensitivität von sechs Douglasien-Herkünften unter subkontinentalen Bedingungen in Sachsen. B.Sc. thesis, TU Dresden, Germany.
- Reißmann, A. (2023). Untersuchung der Klimasensitivität der Gemeinen Fichte (*Picea abies* (L.) Karst.) entlang eines Höhengradienten am Auersberg, Forstbezirk Eibenstock. B.Sc. thesis, TU Dresden.
- Bohn, A. (2022). Vergleich von vitalen und nicht vitalen Individuen von *Fagus sylvatica* hinsichtlich der Klimasensitivität im Nationalpark Hainich. B.Sc. thesis, TU Dresden.
- Staffeld, P.T. (2022). Dendrochronologische Untersuchung von Stieleichen (*Quercus robur* L.) hinsichtlich der Klimasensitivität auf unterschiedlichen Standorten in Mecklenburg-Vorpommern. B.Sc. thesis, TU Dresden.
- Bennewitz, D. (2021). Wachstumsreaktionen eines Kiefernbestandes bei Lampertswalde (Sachsen): abgenommene Trockensensitivität trotz Klimawandel. B.Sc. thesis, TU Dresden, Germany.
- Saupe, E. (2020). Zuwachsreaktionen von ausgewählten Fichten-Klonen mit unterschiedlicher SO₂-Toleranz auf Trockenstress. B.Sc. thesis, TU Dresden, Germany.
- Maß, D. (2018). Variation der Frühjahrsphänologie bei Rotbuchen (*Fagus sylvatica* L.) unter Betrachtung der innerartlichen Konkurrenz. B.Sc. thesis, University of Greifswald, Germany.
- Sönnichsen, H. (2018). Dendroklimatische Untersuchungen an *Picea abies* im Waldgrenzökoton in der Liffjell-Bergregion, Norwegen. B.Sc. thesis, University of Greifswald, Germany.
- Sielaff, E. (2017). Klima-Wachstumsbeziehungen der Stieleiche (*Quercus robur* L.) in der Rostocker Heide – ein Vergleich zwischen einer bewirtschafteten und nicht bewirtschafteten Waldfläche. B.Sc. thesis, University of Greifswald, Germany.
- Lichtenau, S. (2017). Waldverjüngung und Wildverbiss im Karlsburger Oldenburger Holz, Revier Buddenhagen und Revier Jagdkrug im Vergleich. B.Sc. thesis, University of Greifswald, Germany.
- Denfeld, G. (2016). Auswirkungen des Klimas und hydrologischer Schwankungen auf das Wachstum der Waldkiefer (*Pinus sylvestris* L.) und der Schwarz-Erle (*Alnus glutinosa* L.) im Kramsbruch, Müritz Nationalpark. B.Sc. thesis, University of Greifswald, Germany.
- Iwanowski, J. (2016). Auswirkungen kleinräumiger Bodenvariabilität auf das Wachstum und die Klimasensitivität der Rotbuche (*Fagus sylvatica* L.) im Nationalpark Jasmund. B.Sc. thesis, University of Greifswald, Germany.
- Kurzböck, C. (2016). Vergleich von Wachstum und Klimasensitivität zweier Rotbuchen-Altbestände im Müritz-Nationalpark. B.Sc. thesis, University of Greifswald, Germany.
- Mehl, A. (2016). Der Einfluss der Harzung auf die Klimasensitivität der Waldkiefer (*Pinus sylvestris*). B.Sc. thesis, University of Greifswald, Germany.

Rossa, H. (2016). Dendroprovenancing des Dachstuhles der Marienkirche, Greifswald. B.Sc. thesis, University of Greifswald, Germany.

Henke, S. (2015). Vergleich der Pflanzendiversität zweier Grünflächen mit unterschiedlicher Nutzung in den Ryckwiesen westlich von Greifswald. B.Sc. thesis, University of Greifswald, Germany

Räbiger, C. (2014). Dendroökologische Untersuchungen in Jänschwalde Ost. Haben Holzkohlemeilerrückstände im Boden einen Einfluss auf das Wachstum von *Pinus sylvestris*? B.Sc. thesis, University of Greifswald, Germany.

Interns

2 finished research traineeships:

Haupt, S. (2017). Der Einfluss von Salzwasser auf das Wachstum der Kiefern (*Pinus sylvestris*) im Darßwald – eine dendroökologische Untersuchung. Report, University of Greifswald / University of Rostock, Germany.

Pape, J. (2015). Seasonal growth patterns of three broadleaved tree species in relation to monthly climate in Eldena forest. Report, University of Greifswald, Germany.

Skills & Qualifications

Familiar software packages

Microsoft Office, L^AT_EX
R/RStudio
CooRecorder/CDendro, ROXAS
imageJ
QGIS

Languages

Dutch (native)
English (fluent)
German (fluent)
French (basic)

Journal publications

63. International Tree Mortality Network, Senf, C., Esquivel-Muelbert, A., Pugh, T.A., Anderegg, W.R., Anderson-Teixeira, K.J., ..., **van der Maaten, E.** & van der Maaten-Theunissen, M. (in press) Towards a global understanding of tree mortality. *New Phytologist*. doi: 10.1111/nph.20407
62. Jevšenak, J., Klisz, M., Mašek, J., Čada, V., Janda, P., Svoboda, M., Vostarek, O., Tremel, V., **van der Maaten, E.**, Popa, A., Popa, I., van der Maaten-Theunissen, M., Zlatanov, T., Scharnweber, T., Ahlgrimm, S., Stolz, J., ..., Kuithan, C., et al. (2024). Incorporating high-resolution climate, remote sensing and topographic data to map annual forest growth in central and eastern Europe. *Science of the Total Environment* **913**: 169692. doi: 10.1016/j.scitotenv.2023.169692
61. Kaiser, K., Theuerkauf, M., **van der Maaten, E.**, van der Maaten-Theunissen, M. & Beil, A. (2024). Forest history from a single tree species perspective: natural occurrence, near extinction and reintroduction of European yew (*Taxus baccata* L.) on the Darss-Zingst peninsula, southern Baltic Sea coast. *European Journal of Forest Research* **143**: 917-942. doi: 10.1007/s10342-024-01665-1
60. Klesse, S., Peters, R., Alfaro-Sanchez, R., ..., **van der Maaten, E.**, van der Maaten-Theunissen, M., Vannoppen, A., Vasickova, I., von Arx, G., Wilmking, M., Weigel, R., Zlatanov, T., Zang, C. & Buras, A. (2024). No future growth enhancement expected at the northern edge for

European beech due to continued water limitation. *Global Change Biology* **30**: e17546. doi: 10.1111/gcb.17546

59. Kormann, J.M., **van der Maaten, E.**, Liesebach, M., Liepe, K.J. & van der Maaten-Theunissen, M. (2024). High risk, high gain? Trade-offs between growth and resistance to extreme events differ in northern red oak (*Quercus rubra* L.). *Frontiers in Plant Science - Section Functional Plant Ecology* **15**: 1374498. doi: 10.3389/fpls.2024.1374498
58. Kormann, J.M., van der Maaten-Theunissen, M., Unterholzner, L., Liesebach, M., Liepe, K. & **van der Maaten, E.** (2024). Variation in vessel traits of northern red oak (*Quercus rubra* L.) provenances revealed high phenotypic plasticity to prevailing environmental conditions. *Trees* **38**: 1283-1295. doi: 10.1007/s00468-024-02557-y
57. Leifsson, C., Buras, A., Klesse, S., Baittinger, C., Bat-Enerel, B., Battipaglia, G., Biondi, F., Stajić, B., Budeanu, M., Čada, V., Camarero, J.J., Cavin, L., Claessens, H., Čufar, K., de Luis, M., Dorado-Liñán, I., Dulamsuren, C., Garamszegi, B., Grabner, M. Hacket-Pain, A., Hansen, J.K., Hartl, C., Huang, W., Janda, P., Jump, A.S., Kazimirović, M., Knutzen, F., Kreyling, J., Land, A., Latte, N., Lebourgeois, F., Leuschner, C., Longares, L.A., del Castillo, E.M., Menzel, A., Motta, R., Muffler-Weigel, L., Nola, P., Panayatov, M., Petritan, A.M., Petritan, I.C., Popa, I., Roibu, C.C., Rubio-Cuadrado, Á., Rydval, M., Scharnweber, T., Svoboda, M., Toromani, E., Trotsiuk, V., van der Maaten-Theunissen, M., **van der Maaten, E.**, Weigel, R., Wilmking, M., Zlatanov, T., Rammig, A. & Zang, C. (2024). Identifying drivers of non-stationary climate-growth relationships of European beech. *Science of the Total Environment* **937**: 173321. doi: 10.1016/j.scitotenv.2024.173321
56. Liepe, K.J., **van der Maaten, E.**, van der Maaten-Theunissen, M., Kormann, J.M., Wolf, H. & Liesebach, M. (2024). Ecotypic variation in multiple traits of European beech: selection of suitable provenances based on performance and stability. *European Journal of Forest Research* **143**: 831-845. doi: 10.1007/s10342-024-01656-2
55. Popa, A., **van der Maaten, E.**, Popa, I. & van der Maaten-Theunissen, M. (2024). Early warning signals indicate climate change-induced stress in Norway spruce in the Eastern Carpathians. *Science of the Total Environment* **912**: 169167. doi: 10.1016/j.scitotenv.2023.169167
54. Popa, A., van der Maaten-Theunissen, M., Popa, I., Badea, O. & **van der Maaten, E.** (2024). Spruce suffers most from drought at low elevations in the Carpathians, though shows high resilience. *Forest Ecology and Management* **571**: 122201. doi: 10.1016/j.foreco.2024.122201
53. Thurm, E.A., **van der Maaten, E.**, van der Maaten-Theunissen, M., Schröder, J. & Jütte, K. (2024). Buchenvitalitätsschwäche – Totgesagte leben länger! *AFZ-Der Wald* **6**: 36-39.
52. Tyrgotov, A., **van der Maaten, E.**, Gradel, A. & van der Maaten-Theunissen, M. (2024). Growth responses of Persian walnut (*Juglans regia* L.) to climate variation along its full elevational range in Kyrgyzstan. *Dendrochronologia* **85**: 126203. doi: 10.1016/j.dendro.2024.126203
51. Unterholzner, L., Stolz, J., van der Maaten-Theunissen, M., Liepe, K. & **van der Maaten, E.** (2024). Site conditions rather than provenance drive tree growth, climate sensitivity and drought responses in European beech in Germany. *Forest Ecology and Management* **572**: 122308. doi: 10.1016/j.foreco.2024.122308
50. **van der Maaten, E.**, Thurm, E.A., Stolz, J., Henkel, A., Leinemann, L., Profft, I., Schröder, J., Voth, W. & van der Maaten-Theunissen, M. (2024). Long-term growth decline is not reflected in crown vitality status of European beech after a recent extreme drought. *Forest Ecology and Management* **551**: 121516. doi: 10.1016/j.foreco.2023.121516
49. Hirsch, F., Schneider, A., van der Maaten-Theunissen, M., **van der Maaten, E.**, Rübiger, C., Raab, A. & Raab, T. (2023). Soil properties and tree growth at medieval ridge and furrow sites in Brandenburg, northeastern Germany. *Journal of Plant Nutrition and Soil Science* **186**: 417-427. doi: 10.1002/jpln.202200345

48. Jetschke, G., **van der Maaten, E.** & van der Maaten-Theunissen, M. (2023). Pointer years revisited: Does one method fit all? A clarifying discussion. *Dendrochronologia* **78**: 126064. doi: 10.1016/j.dendro.2023.126064
47. Nasibullina, A., van der Maaten-Theunissen, M., **van der Maaten, E.**, Fischer, H. & Wagner, S. (2023). Thinning effects on growth and occurrence of rotting in aspen stands. *Journal of Forest Science* **69**: 525-538. doi: 10.17221/103/2023-JFS
46. Stolz, J., Forkel, M., **van der Maaten, E.**, Martin, J. & van der Maaten-Theunissen, M. (2023). Through eagle eyes—the potential of satellite-derived LAI time series to estimate masting events and tree-ring width of European beech. *Regional Environmental Change* **23**: 74. doi: 10.1007/s10113-023-02068-5
45. Visser, H., van der Maaten-Theunissen, M. & **van der Maaten, E.** (2023). BAI BAI bias – An evaluation of uncertainties in calculating basal area increments from cores. *Dendrochronologia* **78**: 126066. doi: 10.1016/j.dendro.2023.126066
44. Dorado-Liñán, I., Ayarzagüena, B., Babst, F., Xu, G., Gil, L., Battipaglia, G., Buras, A., Čada, V., Camarero, J. J., Cavin, L., Claessens, H., Drobyshev, I., Garamszegi, B., Grabner, M., Hacket-Pain, A., Hartl, C., Hevia, A., Janda, P., Jump, A. S., Kazimirovic, M., Keren, S., Kreyling, J., Land, A., Latte, N., Levanič, T., **van der Maaten, E.**, van der Maaten-Theunissen, M., Martínez-Sancho, E., Menzel, A., Mikoláš, M., Motta, R., Muffler, L., Nola, P., Panayotov, M., Petritan, A. M., Petritan, I. C., Popa, I., Prislan, P., Roibu, C.-C., Rydval, M., Sánchez-Salguero, R., Scharnweber, T., Stajić, B., Svoboda, M., Tegel, W., Teodosiu, M., Toromani, E., Trotsiuk, V., Turcu, D.-O., Weigel, R., Wilmking, M., Zang, C., Zlatanov, T. & Trouet, V. (2022). Jet stream position explains regional anomalies in European beech forest productivity and tree growth. *Nature Communications* **13**: 2015. doi: 10.1038/s41467-022-29615-8
43. Liepe, K.J., **van der Maaten, E.**, van der Maaten-Theunissen, M. & Liesebach, M. (2022). High phenotypic plasticity, but low signals of local adaptation to climate in a large-scale transplant experiment of *Picea abies* (L.) Karst. in Europe. *Frontiers in Forests and Global Change* **5**: 804857. doi: 10.3389/ffgc.2022.804857
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