

SUMMARY

Data-driven climate change impact researcher and climate economist researching the impacts and human responses of climate change with expertise in data science and science communication.

Version: November 2022

RELEVANT PROFESSIONAL & ACADEMIC EXPERIENCE

- United Nations University, Bonn, Germany** Nov 2022–
Senior Researcher - Institute for Environment and Human Security (UNU-EHS)
- Princeton University, Princeton, NJ** Nov 2021–Oct 2022
Postdoctoral Research Associate - Impacts & Human Responses to Climate Change
Supervisor: Michael Oppenheimer
- Frontiers, Lausanne, Switzerland** Apr 2022–
Associate Editor Frontiers in Climate – Climate Mobility
- The World Bank, Washington, D.C.** Mar 2022–
Climate Change Consultant
 Quantitative analyses on social and conflict implications from climate change in Somalia. Leading a group of three external consultants.
- Knowledge Action Network on Emergent Risks and Extreme Events (Risk KAN)** 2022–2024
Risk KAN Steering Committee member
- Climate Econometrics, Oxford** 2018–
Associate Researcher (since September 2021)
Doctoral Researcher, Nuffield College/ Institute for New Economic Thinking (2018–2021)
- European Cooperation in Science and Technology** 2019–2021
Working Group Member of the EU COST Action “Drylands Facing Change” (CA16233).
- The World Bank, Washington, D.C.** 2016–2018
Environmental Economist
Mentor: Michael Toman
- The Earth Institute, New York, N.Y.** 2014–2016
Research & Teaching Assistant, Research Program on Sustainability Policy & Management
- International Monetary Fund, Washington, D.C.** 2015
Fund Internship Program
- Volkswagen AG, Wolfsburg & Berlin, Germany** 2012–2013
Undergraduate Researcher, Mobility Services/ Sustainability Initiative

EDUCATION

- University of Oxford, Oxford, UK**
 DPhil in Geography and the Environment, 2021
 Dissertation: *Climate mobilities in East Africa: Methods towards attributing human mobility and extreme weather events in the era of climate change*
Supervisor: Friederike Otto, Examination Committee: Myles Allen and Michael J. Puma
- Columbia University in the City of New York, New York, NY**
 Master of Science in Sustainability Management, 2014 – 2016
- Business & Information Technology School, Iserlohn, Germany**
 Bachelor of Science in Business and Economics (double degree), 2008 – 2013

VISITING POSITIONS

Visiting Scholar, Potsdam Institute for Climate Impact Research (PIK)	Jun-Jul 2022
Visiting Scholar, Vienna University of Economics and Business	Sep 2021 & Aug 2022
Visiting Scholar, International Institute for Applied Systems Analysis	Aug 2021
Visiting Researcher, IFRC/ Red Cross Climate Centre (remotely)	Apr 2020
Visiting Researcher, Universidad Latina de Costa Rica	Feb 2013
Visiting Student, Faculty of Economics and Business, CUNY	2010

AWARDS, GRANTS & SCHOLARSHIPS

2022	German Foundation for Peace Research (joint with PIK, Potsdam)	€	18,300
2021	WRI India (sponsored by Blackrock & Microsoft) hackathon (first place)	\$	30,000
2020	IIASA Young Scientist Summer Programme Fellowship	€	1,350
2020	ECI Sustainability Fellowship	£	3,000
2019	Max-Planck Institute for Biogeochemistry conference stipend	€	500
2019	Ford Foundation Research Grant	\$	2,000
2018	Royal Geographical Society-IBG conference bursary	£	100
2018	Christ Church Language Study Grant, Oxford	£	250
2018	Doctoral writing grant, ECI, Oxford	£	350
2018-2021	Climate Econometrics Research Fellowship, Nuffield College, Oxford	£	9,000
2018-2021	German Federal Ministry of Education and Research Doctoral Fellowship	€	82,200
2015	IMF Fund Internship Program Research Grant, Washington D.C.	\$	13,500

SELECTED HONOURS

2020	Christ Church essay competition winner to attend the Leonardo da Vinci exhibition (Paris).
2019	Modeling the World's Systems, award for best presentation, University of Pittsburgh.
2018	Royal Geographical Society (RGS) Ambassador.
2018	RGS Royal Society Mid-Term Conference Award.
2018	Galilee Institute Israel, Study Award.
2017	Global Youth Climate Network Climate Ambassador, The World Bank.

SERVICE & DIVERSITY, EQUITY and INCLUSION ADVANCEMENT

Associate Editor, Frontiers in Climate, section Climate Mobility	global	Apr 2022 – present
Founder & co-chair, Talking research: Science communication training for PhD students and postdocs	Princeton, NJ	Mar 2022 – present
Member, Knowledge Action Network on Emergent Risks and Extreme Events	global	Feb 2022 – present
Interviewer, Geography undergraduate admissions	Christ Church, Oxford	Dec 2020
Senior Common Room Liaison Officer	Christ Church, Oxford	May – Dec 2020
Global Youth Climate Network Ambassador	World Bank Youth Community	2017 – 2020
Environment & Ethics Officer	Christ Church, Oxford	Dec 2017 – May 2020
Fundraiser, Bikes for the World	Washington, D.C.	2016 – 2017
Contributor	State of the Planet, Columbia University, NY	2015 – 2016
Graduate Consultant	Columbia Impact Investing Initiative, Columbia University	2015
Co-organiser	Campus Symposium, Business and Information Technology School, Iserlohn	2009 – 2011

PUBLICATIONS

h-index 6, citations 114 (Google Scholar, 11/25/22)

ARTICLES IN PEER-REVIEWED JOURNALS

Thalheimer, L., Heinrich, D. Haustein, K. and Singh, R. (accepted). Applying extreme event attribution to climate-related human mobility. *Meteorology*.

Thalheimer, L., Choquette-Levy, N. and Garip, F. (2022). Multi-method evidence for when and how compound events affect human mobility. *iScience*. <https://doi.org/10.1016/j.isci.2022.105491>.

Martin, M., [...] **Thalheimer, L.**, [...] (accepted). Ten new insights in climate science 2022. *Global Sustainability*. <https://doi.org/10.1017/sus.2022.17>.

Thalheimer, L. (2022). Compound impacts of extreme weather events and COVID-19 on climate mobilities. *AREA*. <https://doi.org/10.1111/area.12821>.

Thalheimer, L., Jjemba, E., & Simperingham, E. (2022). The role of forecast-based financing. *Forced Migration Review*, (69), 34-36.

Thalheimer, L., Simperingham, E. and Jjemba, E. (2022) ‘The role of anticipatory humanitarian action to reduce disaster displacement’. *Environmental Research Letters*. doi.org/10.1088/1748-9326/ac4292.

Thalheimer, L., Williams, D.S., Van der Geest, K., Otto, F.E.L., (2021). Advancing the evidence base of future warming impacts on human mobility in African drylands. *Earth's Future*. doi.org/10.1029/2020EF001958.

Thalheimer, L., Otto, F.E.L., Abele, S.J., (2021). Deciphering Impacts and Human Responses to a Changing Climate in East Africa. *Frontiers in Climate*. [doi: 10.3389/fclim.2021.692114](https://doi.org/10.3389/fclim.2021.692114).

Stavi, I., Paschalidou, A., Kyriazopoulos, A. P., ..., **Thalheimer, L.**, Williams, D.S., ... & Ficko, A. (2021). Multidimensional Food Security Nexus in Drylands under the Slow Onset Effects of Climate Change. *Land*, 10(12), 1-14.

Heslin, A. and **Thalheimer, L.** (2020) The Picture from Above - Using Satellite Imagery to Overcome Methodological Challenges in Studying Environmental Displacement. *Oxford Monitor of Forced Migration*.

Under review/ revision

Thalheimer, L., Pretis, F., Schwarz, M. P., (in revision). Large weather and conflict effects on internal displacement in Somalia with little evidence of feedback onto conflict. *Global Environmental Change*.

Tradowsky, J., [...], **Thalheimer, L.**, [...] (under review). Attribution of the heavy rainfall events leading to severe flooding in Western Europe during July 2021. *Climatic Change*.

Harrington, L., [...], **Thalheimer, L.**, [...] (in revision). Factors other than climate change exacerbated the impacts of severe low rainfall in southern Madagascar, 2019-21. *Environmental Research: Climate*.

Thalheimer, L., Gaupp, F., Webersik, C., (under review). Impact pathways of vulnerability and systemic risk on food insecurity in Somalia. *World Development Perspectives*.

In preparation / submitted/ invited

Thalheimer, L., Muttarak, R., Crespo Cuaresma, J., Li, S., Otto, F.E.L., Oppenheimer, M. (submitted). Attributing human mobility to climate change: A feasibility study. *Climatic Change*.

Thalheimer, L., and Woi, S. O. (submitted). Taking stock of displacement data to explain weather and climate-related displacement outcomes. *Climate Risk Management*.

Thalheimer, L., Šedová, B., Oppenheimer, M., (in preparation). When does climate (im)mobility cause conflict? The need for an expert assessment.

Working Papers

Kruitwagen, L., Ardene, C., Lees, T., **Thalheimer, L.**, (preprint). Using Neural Hydrology to forecast water reservoir levels across India. Available at <https://eartharxiv.org/repository/view/3381/>.

Thalheimer, L., (2020) 'Towards attributing climate-related displacement in Somalia to anthropogenic climate change. IIASA YSSP Report. Laxenburg, Austria.

PAPERS IN EDITED VOLUMES

Thalheimer, L. (2022) 'Compounding vulnerabilities and human mobility in East Africa', in Migration in the Face of Emerging Risks: Historical Case Studies, New Paradigms, and Future Directions, Palgrave-Mcmillan.

Thalheimer, L., and Webersik, C. (2020) 'Climate Change, Conflict and Migration', In Krieger, T., Panke, D. and Pregernig, M. (eds.) Environmental Conflicts, Migration and Governance, Bristol: Bristol University Press, pp. 59-82.

ESSAYS, REPORTS AND ISSUE BRIEFS

1. Zachariah, M., [...], **Thalheimer, L.**, [...] (2022). Climate change exacerbated heavy rainfall leading to large scale flooding in highly vulnerable communities in West Africa. (World Weather Attribution). Available at https://www.worldweatherattribution.org/wp-content/uploads/Nigeriafloods_scientific-report.pdf.
2. Future Earth, The Earth League, WCR (2022). 10 New Insights in Climate Science 2022. (2022). Stockholm. Available at https://10insightsclimate.science/wp-content/uploads/2022/11/10NICS-2022-Report_digital.pdf.
3. Otto, F.E.L. , [...], **Thalheimer, L.**, [...] (2022). Climate change likely increased extreme monsoon rainfall, flooding highly vulnerable communities in Pakistan. (World Weather Attribution). Available at <https://www.worldweatherattribution.org/wp-content/uploads/Pakistan-floods-scientific-report.pdf>.
4. Zachariah, M., [...], **Thalheimer, L.**, [...] F.E.L. Otto (2022). Without human-caused climate change temperatures of 40 °C in the UK would have been extremely unlikely. (World Weather Attribution). Available at <https://www.worldweatherattribution.org/wp-content/uploads/UK-heat-scientific-report.pdf>.
5. Zachariah, M., [...], **Thalheimer, L.**, [...] F.E.L. Otto (2022). Climate change increased heavy rainfall, hitting vulnerable communities in Eastern Northeast Brazil. (World Weather Attribution). Available at <https://www.worldweatherattribution.org/wp-content/uploads/Brazil-Floods-Scientific-report.pdf>.
6. Jjemba, E. and **Thalheimer, L.** (2022). 'Harnessing anticipatory action to avoid or reduce disaster displacement'. Anticipation Hub. Available at <https://www.anticipation-hub.org/news/harnessing-anticipatory-action-to-avoid-or-reduce-disaster-displacement>.
7. Zachariah, M., [...], **Thalheimer, L.**, [...], F.E.L. Otto (2022). 'Climate Change made devastating early heat in India and Pakistan 30 times more likely'. (World Weather Attribution). Available at https://www.worldweatherattribution.org/wp-content/uploads/India_Pak-Heatwave-scientific-report.pdf.
8. Pinto, I., [...], **Thalheimer, L.**, [...] et al. (2022). 'Climate change exacerbated rainfall causing devastating flooding in Eastern South Africa'. (World Weather Attribution). Available at <https://www.worldweatherattribution.org/wp-content/uploads/WWA-KZN-floods-scientific-report.pdf>.
9. Otto, F.E.L., [...], **Thalheimer, L.**, [...] et al. (2022). 'Climate change increased rainfall associated with tropical cyclones hitting highly vulnerable communities in Madagascar, Mozambique & Malawi'. (World Weather Attribution). Available at <https://www.worldweatherattribution.org/wp-content/uploads/WWA-MMM-TS-scientific-report.pdf>.
10. Šedová, B. and **Thalheimer, L.** (2022). 'How Climate Change and Migration Cascade in the EU'. EuropeNow. Available at: <https://www.europenowjournal.org/2022/01/30/how-climate-change-and-migration-can-cascade-in-the-eu/>.
11. **Thalheimer, L.**, and Šedová, B (2021). 'Warum Klimamigration für die EU relevant ist'. Der Standard. Available at <https://www.derstandard.at/story/2000130786948/warum-klimamigration-fuer-die-eu-relevant-ist>.

12. **Thalheimer, L.**, Webersik, C. and Gaupp, F. (2022). ‘Systemic Risk Emerging from Compound Vulnerabilities’. Global Assessment Report on Disaster Risk Reduction (GAR2022). Available at <https://www.undrr.org/publication/systemic-risks-emerging-compound-vulnerabilities>.
13. Harrington, L., [...], **Thalheimer, L.**, [...], et al. (2021). ‘Attribution of severe low rainfall in southern Madagascar, 2019-21’. (World Weather Attribution). Available at https://www.worldweatherattribution.org/wp-content/uploads/ScientificReport_Madagascar.pdf.
14. Kreienkamp, F., [...], **Thalheimer, L.**, [...] (2021). ‘Heavy rainfall which led to severe flooding in Western Europe made more likely by climate change’ (World Weather Attribution). Available at <https://www.worldweatherattribution.org/wp-content/uploads/Scientific-report-Western-Europe-floods-2021-attribution.pdf>.
15. **Thalheimer, L.**, Jjemba, E. and Simperingham, E. (2020) ‘Forecast-based Financing and Disaster Displacement: Acting Early to Reduce the Humanitarian Impacts of Displacement’. Available at https://www.forecast-based-financing.org/wp-content/uploads/2020/10/RCRC_IFRC-FbF-and-Displacement-Issue-Brief.pdf.
16. **Thalheimer, L.** (2020) ‘How COVID-19 complicates the journey for climate migrants’ IIASA Nexus. Available at <https://blog.iiasa.ac.at/2020/08/19/how-covid-19-complicates-the-journey-for-climate-migrants/>.
17. Wenham, A. and **Thalheimer, L.** (2020) ‘On the move: What drives Somalia’s migration?’. Available at <http://www.climateeconometrics.org/2020/06/30/on-the-move-what-drives-somalias-migration/>.
18. Parks, R.M. and **Thalheimer, L.** (2020) ‘The hidden burden of pandemics, climate change and migration on mental health’ IOM. Available at <https://environmentalmigration.iom.int/blogs/hidden-burden-pandemics-climate-change-and-migration-mental-health>.
19. De Fontaubert, C., Hart, T., **Thalheimer, L.**, Dubow, AZ, Million, JMF, Collier, JB (2020) ‘Somalia Country Environmental Analysis: Diagnostic Study on Trends and Threats for Environmental and Natural Resources Challenges’ The World Bank. Available at <https://openknowledge.worldbank.org/handle/10986/34058>.
20. **Thalheimer, L.** et al. (2019) ‘Policy Brief: Food Security in Drylands Under a Changing Climate’ EU COST Working Group I (The Climate, Food Security and Population Nexus). DOI: 10.13140/RG.2.2.12140.72324.
21. **Thalheimer L.** (2018) ‘Extreme Weather Events And Population Movement In The Era Of Climate Change’ Population Geography Research Group (PGRG). Available at: <https://popgeog.org/2018/06/21/extreme-weather-events-and-population-movement-in-the-era-of-climate-change/>.

Refereeing: Climate and Development; Earth’s Future; International Journal of Environmental Research and Public Health; Weather, Climate, and Society.

AUDIO

1. “Will climate migration lead to conflict?”, Futuremakers podcast discussion with Prof Peter Millican, 15 March 2020.
2. “COP 25 – what happened?”, Futuremakers podcast discussion with Prof Peter Millican, 19 December 2019.

OTHER MEDIA

1. Klimaforscherin: "Viele Somalier werden von Dürren vertrieben" (German), Austria Presse Agentur, 24 August 2022.
2. „Hunger in Somalia“, interview with Somini Sengupta, The New York Times, 14 June 2022.
3. “Die verheerenden Folgen der Armut in Madagaskar”, Frankfurter Rundschau press brief (in German), with Joachim Wille, 02 December 2021.
4. „Madagascar's food crisis has been blamed on climate change. These scientists say that's wrong“, CNN press brief, with Angela Dewan, 02 December 2021.

5. „SWR Aktuell Rheinland-Pfalz“ (in German), TV interview with Dorit Becker, 06 November 2021.
6. “Europe's floods: Lessons from German tragedy”, BBC interview with James Cook, 28 October 2021.
7. “Sustain What: Stop Debating Climate Dislocation and Start Enhancing Climate Mobility”, with Andrew Revkin, online, The Earth Institute (Columbia University), 22 January 2021.
8. “Matching human movement to climate change”, IIASA Nexus interview, 20 Nov 2020.
9. “What is Climate Migration?”, Peril and Promise (Public Broadcasting Service), 17 July 2019.

PLENARY & KEYNOTE TALKS

“Acting early to reduce the humanitarian impacts of displacement”, Global Dialogue Platform 2021, online, 08 December 2021.

“Forecast- based Financing and Disaster Displacement”, Global Protection Forum 2020, online, 10 September 2020.

“Climate displacement, humanitarian needs and Forecast-based Financing”, European Geosciences Union Press Conference, online, 07 May 2020.

Conference of the Parties (COP25) Side Event - Climate Change, Displacement and Migration, Madrid, December 2019.

SELECTED INVITED TALKS

“Climate Impacts on Conflict and Migration”

- Climate Change 101 Policymaking on a Rapidly Warming Planet, Princeton University (Sep 2022)
- Knowledge Action Network on Emergent Risks and Extreme Events (online, Apr 2020 & Feb 2022)
- Columbia University Managed Retreat Conference (online, Jun 2021)
- ETH Zurich 2020 EAERE-ETH European Winter School (Jan 2020)
- Herrenhausen Conference “Extreme Events – Building Climate Resilient Societies”, Volkswagen Foundation & Max Planck Institute for Biogeochemistry, Hanover (Oct 2019).
- Nuffield Post-Doctoral Research Seminar, Oxford (Jun 2019)
- Columbia University Correlated Extremes Workshop (May 2019)
- Econometric Models of Climate Change Conference, University of Rome (Sep 2018)

“Forecast-based financing for Disaster Displacement”

- Princeton School of Public and International Affairs expert panel (Mar 2022)
- Invited expert “Training on anticipatory action in conflict situations”, Global Public Policy Institute (online, Oct 2021)
- Invited expert, Institute for International Law of Peace and Armed Conflict- Lunch Lecture Series, online (May 2021)
- GIZ, German Development Agency, online (Oct 2020)

“Modelling framework for attributing human mobility and climate change”

- Wittgenstein Centre Conference, online (2020, 2022)
- Vienna University of Economics and Business, Institute for Macroeconomics, Vienna (09 September 2021)
- Compound weather and climate events, European Geosciences Union, Vienna (online, 28 April 2021)
- “The climate impacts of the economic and demographic slowdown”, with Prof Danny Dorling, The Oxford School of Climate Change, Brasenose College, Oxford (18 February 2020)
- University of Pittsburgh, Modeling and Managing Complicated Systems (MOMACS), Washington, DC (May 2019)

“Systemic risks”

- Drought Impacts and Migration, United Nations University (online, Mar 2019).
- EU COST Action (CA16233) Workshop, Arad, Israel (Feb 2019).
- “Food and Climate Migration”, Oxford Food Thinkers Lunch Club (Nov 2017)
- IIASA research seminar, online, 25 July 2020

OUTREACH ACTIVITIES

1. Financial Times, African climate expert supporting Africa editor David Pilling (2021 – present)
2. STAND Student Festival “Climate Migration”, online, 20 October 2020
3. Oxford Museum of Natural History - Super Science Saturday, 23 November 2019

WORKSHOP AND TEACHING EXPERIENCE

2nd Training School on Compound Events, September 2022, Como, Italy
Climate Mobility Research Symposium, Columbia University, September 2022
Talking Research: Communicating your Research to the Public, Princeton University, April 2022
Summer School, Evangelisches Studienwerk Villigst, September 2021 (online)
Tutorial Environmental Geography, Christ Church, University of Oxford, February 2021 (online)
Tutorial Attribution Science, Mansfield College, February 2020 (cancelled due to the COVID-19 pandemic)
University of Oxford, Christ Church Geography access workshop, February 2020
The Oxford School of Climate Change, February 2020
Drought Impacts, United Nations University (UNU-EHS), March 2019 (online)
Christ Church seminar on *Geographical Controversies*, 01 March 2019
UNIQ Summer School, University of Oxford, July 2018 and 2019,
Teaching Assistant, Economics of Sustainability Management, Columbia University, 2015

PROFESSIONAL AFFILIATIONS

World Weather Attribution,	Potsdam Institute for Climate Impact Research
American Geophysical Union,	European Geosciences Union,
Knowledge-Action Network on Emergent	Royal Geographical Society,
Risks and Extreme Events (Risk KAN),	The Royal Academy of Dance.

LANGUAGES

Human: German & English (native/ bilingual); French & Spanish (advanced), Yiddish (advanced beginner)
Programming: Python, R, FME, (Q)GIS, OxMetrics, ArcGIS StoryMaps

HOBBIES

Ballet, bouldering, hiking, scrabble, and drawing.

REFERENCES

Michael Oppenheimer
School of Public and International Affairs
Princeton University
omichael@princeton.edu

Friederike E.L. Otto
Grantham Institute
Imperial College London
f.otto@imperial.ac.uk

Felix Pretis
Department of Economics
University of Victoria
fpretis@uvic.ca

Michael J. Puma
Center for Climate Systems Research
NASA Goddard Institute for Space Studies
mjp38@columbia.edu