

Maximilian Kotz

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Research interests Climate impacts, detection attribution, pattern recognition, econometrics.

Education **Potsdam Institute for Climate Impact Research** Potsdam, Germany
PhD in Climate impacts 2019 – Present
Mentors: Professor Anders Levermann, Dr Leonie Wenz

University of Cambridge Cambridge, United Kingdom
MSci in Physics 2017 – 2018
Mentor: Professor Alpha Lee *First Class Honours.*

University of Cambridge Cambridge, United Kingdom
BA in Physics, minor in Earth Sciences 2014 – 2017
First Class Honours.

Honors and scholarships Robinson College Prize and Scholarship (University of Cambridge) 2017, 2018
Summer Undergraduate Research Fellowship (CalTech) 2017
Research Experience Placement (NERC) 2016

Publications **Day-to-day temperature variability reduces economic growth**
Maximilian Kotz, Annika Stechemesser, Leonie Wenz, Matthias Kalkuhl, Anders Levermann
Nature Climate Change, 2021.

A spatially explicit individual-based model to support management of commercial and recreational fisheries for European sea bass *Dicentrarchus labrax*
Nicola D Walker, Robin Boyd, Joseph Watson, Maximilian Kotz, Zachary Radford, Lisa Readdy, Richard Sibly, Shovonlal Roy, Kieran Hyder
Ecological Modelling, 2020.

Research experience **Data-based analysis of climate decisions**
Mentors: Professor Anders Levermann, Dr Leonie Wenz (PIK) 2019 – Present
Data-based techniques (econometric, pattern recognition, detection/attribution) to identify aspects of climate which are: a) important for societal outcomes such as economic growth, and/or b) changing as a consequence of anthropogenic climate change. Further details found [here](#).

Oceanographic Researcher in the Antarctic Ocean 2019

Mentors: Professor Andrew Thompson (California Institute of Technology)
Guest field researcher on US-GO SHIP cruise to deploy two autonomous underwater vehicles (AUVs).

Masters thesis: automated discovery of physical law 2017-2018

Mentors: Professor Alpha Lee (University of Cambridge)
The development of statistical tools for the automated discovery of physical laws, including the use of image compression algorithms as an indicator of phase transitions in active matter systems.

Summer Undergraduate Research Fellowship - Environmental Engineering 2017

Mentors: Professor Andrew Thompson (California Institute of Technology)
Remote sensing to assess inter-annual sea-level variability along the Eastern Seaboard and its relation to large-scale climatic oscillations.

National Environmental Research Council Summer Researcher

Mentors: Professor Richard Sibly (University of Reading/CEFAS) 2016
Development of an agent based-based numerical model for the spatial population dynamics of sea bass in UK waters.

Talks and tutorials

Daily temperature variability: economic impacts and evolution under climate change 2020.12

RD4-Complexity Science seminar series, Potsdam Institute for Climate Impact Research

Living on a warming planet 2020.08

Sommerschule Klimawissen. Museum für Naturkunde, Berlin.

Skills

Programming

Proficient in: Python, R.

Familiar with: C++, Stata.