# Curriculum Vitae: Christian T. Wild, Dr.

CONTACT Information Principal Residence

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**Personal Dates** 

Date of birth: 5<sup>th</sup> Jan. 1987 Place of birth: Munich Citizenship: German



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#### EMPLOYMENT

### Department of Geosciences, University of Tübingen, Germany

2024 - 2025 Postdoctoral Scholar

- Slipping or Shearing in the margins of outlet glaciers in Antarctica (SOS-Antarctica project)
- PIs: Reinhard Drews and Christian Wild
- Funding Agency: DFG

# College of Earth, Ocean and Atmosphere Sciences, Oregon State University

2019 - 2024 Postdoctoral Scholar

- Thwaites-Amundsen Regional Survey and Network Integrating Atmosphere-Ice-Ocean Processes (TARSAN project within ITGC)
- PIs: Erin Pettit and Karen Heywood
- Funding Agency: NSF, NERC

## Gateway Antarctica, University of Canterbury, NZ

2019-2019 Research Associate, February - July

- Short-term acceleration of Antarctic outlet glaciers and the link to ocean tides
- Co-PIs: Oliver Marsh and Wolfgang Rack
- Funding Agency: NZARI

2014 - 2019 PhD in Antarctic Studies

- PhD Thesis Topic: Measurements and Modeling of Tidal Ice-Shelf Flexure in Antarctic grounding zones
- Supervisors: Wolfgang Rack, Oliver Marsh, Heather Purdie, Mathieu Sellier
- Funding Agencies: Marsden Fund, NZARI, MFAT

### Department of Atmospheric and Cryospheric Sciences, Austria

2014-2014 Researcher at the Division for Ice and Climate, June - September

- OGGM the Open Global Glacier Model, implementing its centerline module
- Project Leader: Ben Marzeion
- Funding Agency: Austrian Science Fund (FWF)

### EDUCATION Studies at University of Innsbruck, Austria

2011-2014 Master's programme Atmosphere Sciences

- MSc Thesis Topic: Sensitivity studies of an ice flow model
- Advisors: Ben Marzeion, Alexander H. Jarosch, Georg Kaser

2008 – 2011 Bachelor's programme Geosciences and Atmosphere Sciences

- BSc Thesis Topic: Air pollution dependent on cloudage, precipitation and global radiation in the area of Innsbruck (german)
- Advisor: Ulrike Nickus

### QUALIFICATIONS Publications

published

Scambos TA, (incl. Wild CT) et al., 2025. AMIGOS-3 multi-sensor stations and the climate, ice, and ocean conditions at Thwaites Eastern Ice Shelf during 2020-2022, *Journal of Glaciology*, https://doi.org/10.1017/jog.2024.96

Price D, (incl. Wild CT) et al., 2025. Basal Reflectance and Melt Rates Across the Ross Ice Shelf, Antarctica, From Grounding Line to Ice Shelf Front, *Journal of Glaciology*, https://doi.org/10.1017/jog.2025.10

Wild CT et al., 2024. Rift propagation signals the last act of the Thwaites Eastern Ice Shelf despite low basal melt rates, *Journal of Glaciology*, https://doi.org/10.1017/jog.2024.64

Wåhlin A, (incl. **Wild CT**) et al., 2024. Swirls and scoops: Ice base melt revealed by multibeam imagery of an Antarctic ice shelf, *Science Advances*, https://doi.org/10.1126/sciadv.adn9188

Alley KE, (incl. **Wild CT**) et al., 2024. Evolution of sub-ice-shelf channels reveals changes in ocean-driven melt in West Antarctica, *Journal of Glaciology*, https://doi.org/10.1017/jog.2024.20

Gomez-Fell R, (incl. Wild CT) et al., 2023. Basal mass balance and prevalence of ice tongues in the Western Ross Sea, Frontiers in Earth Science, , https://doi.org/10.3389/feart.2023.1057761.

Wild CT et al., 2022. Weakening of the pinning point buttressing Thwaites Glacier, West Antarctica, *The Cryosphere*, https://doi.org/10.5194/tc-16-397-2022

Dotto TS, (incl. Wild CT) et al., 2022. Ocean variability beneath Thwaites Eastern Ice Shelf driven by the Pine Island Bay Gyre strength, *Nature Communications*, https://doi.org/10.1038/s41467-022-35499-5

Alley KE, Wild CT et al., 2021. Two decades of dynamic change and progressive destabilization on the Thwaites Eastern Ice Shelf, *The Cryosphere*, https://doi.org/10.5194/tc-15-5187-2021

Drews R, Wild CT et al., 2021. Grounding-zone flow variability of Priestley Glacier, Antarctica, in a diurnal tidal regime,  $Geophysical\ Research\ Letters$ , https://doi.org/10.1029/2021GL093853

Wild CT et al., 2019. Differential InSAR for tide modelling in Antarctic ice-shelf grounding zones, *The Cryosphere*, https://doi.org/10.5194/tc-13-3171-2019

Maussion F, (incl. **Wild CT**) et al., 2019. The Open Global Glacier Model (OGGM) v1.0,  $Geoscientific\ Model\ Development$ , https://doi.org/10.5194/gmd-12-909-2019

Wild CT et al., 2018. Unravelling InSAR observed Antarctic ice-shelf flexure using 2-D elastic and viscoelastic modelling, *Frontiers in Earth Science*, https://doi.org/10.3389/feart.2018.00028

Wild CT et al., 2017. Viscosity and elasticity: a model-intercomparison of ice-shelf bending in an Antarctic grounding zone, *Journal of Glaciology*, https://doi.org/10.1017/jog.2017.15

Rack W, (incl. **Wild CT**) et al., 2017. Analysis of ice-shelf flexure and its InSAR representation in the grounding zone of the Southern McMurdo Ice Shelf, *The Cryosphere*, http://dx.doi.org/10.5194/tc-11-2481-2017

Rosier SHR, (incl. Wild CT) et al., 2017. On the interpretation of ice-shelf flexure measurements,  $Journal\ of\ Glaciology$ , https://doi.org/10.1017/jog.2017.44

#### Publications continued

in review

Wild CT et al., 2025. Variability in Antarctic Ice Shelf Basal Melting Due to Finescale Topography, Tides, and Meltwater Plume Regulation, *Science Advances* (pdf can be provided upon request)

Wild CT et al., 2025. Monitoring Shear-Zone Weakening in East Antarctic Outlet Glaciers through Differential InSAR Measurements, *The Cryosphere*, https://doi.org/10.5194/egusphere-2024-3593

Wild CT et al., 2025. A Tale of Two Ice Shelves: Competing Glacial Dynamics During the Unpinning of the Dotson-Crosson Ice Shelf System, West Antarctica, Journal of Geophysical Research: Earth Surface, https://doi.org/10.22541/essoar.172745052.28786721/v1

Višnjević V, (incl. **Wild CT**) et al., 2025. Mapping the Composition of Antarctic Ice Shelves as a Metric for Their Susceptibility to Future Climate Change, *Geophysical Research Letters* (pdf can be provided upon request)

Collao-Barrios G, (incl. **Wild CT**) et al., 2025. Tidal Influence on Flow Dynamics of Dotson Ice Shelf, West Antarctica, *The Cryosphere*, https://doi.org/10.5194/egusphere-2024-1895

Banerjee D, (incl. **Wild CT**) et al., 2025. Evolution of Shear-zone Fractures Presages the Disintegration of Thwaites Eastern Ice Shelf, *Journal of Geophysical Research: Earth Surface* (pdf can be provided upon request)

currently in prep.

Wild CT et al., 2025. Thwaites Eastern Ice Shelf Observations Reveal Sea-Ice Dynamics and Deep-Water Warming in Pine Island Bay, West Antarctica, Ocean Science

Wild CT et al., 2025. Basal Channel Dynamics beneath the Thwaites Eastern Ice Shelf as Proxy for Elevated Past Oceanic Forcing in West Antarctica, *Journal of Glaciology* 

Marsh OJ and Wild CT, 2025. Tidal grounding line migration of the Darwin Glacier, Antarctica, observed using differential InSAR.

Remote Sensing

Yoon S-T, (incl. Wild CT) et al., 2025. Sea ice cover over deep troughs shapes ocean heat transported to an Antarctic ice shelf,

Nature

Muto A, (incl. Wild CT) et al., 2025. Active-source seismic soundings of seafloor depth beneath Thwaites and Dotson Ice Shelves, West Antarctica, Earth System Science Data



#### AWARDS

- DFG project with PI Drews: SOS Antarctica Slipping Or Shearing in the margins of outlet glaciers in Antarctica, (300000 EUR over two years)
- MATARIKI Seed Fund: The role of shear margins in rapid ice sheet acceleration, (10000 EUR)
- Departmental Scholarship covering the duration of my PhD at Gateway Antarctica, \$25000 NZD per annum over four years
- Ministry of Foreign Affairs and Trade Scholarship in Antarctic and Southern Ocean Studies, \$5000 NZD per annum
- Travel fellowships from Scientific Committee on Antarctic Research (SCAR, \$700 USD), National Aeronautics and Space Administration (NASA, \$1000 USD), New Zealand Antarctic Research Institute (NZARI, \$500 NZD)
- Best presentation prizes from OSU Postdoctoral Association (\$200 USD), Antarctica New Zealand (\$200 NZD), New Zealand Snow and Ice Research Group (\$100 NZD)

### OUTREACH EXPERIENCES

### polarchristian.com

- Science in Antarctica a Virtual Reality documentary about polar glaciology
- Alpine Glaciology a Virtual Reality introduction to mass balance monitoring
- Blogging from the ice an online blog with daily updates from the deep field
- Science is art false color satellite imagery as modern pop art

#### Other:

- Good morning, Antarctica a daily radio show with global broadcasting
- Writing posts for the University of Canterbury Science blog
- Heimplanet ambassador testing specialist tents in Antarctica
- Assistance for the television production of the documentary TERRA-X Glaciers

## Recent Conferences

2025	CHINARE symposium onboard the Xue Long 2 icebreaker. Ice-shelves the key to predicting sea-level rise, oral
2024	ITGC final science meeting: Rift propagation signals the last act of the Thwaites Eastern Ice Shelf, despite low basal melt rates, oral, Cambridge, UK
2024	EGU (invited): Assessing the Structural Stability of Thwaites Eastern Ice Shelf and Its Influence on the Future Evolution of Thwaites Glacier, Vienna, Austria
2024	EGU: Monitoring Shear-Zone Weakening in East Antarctic Outlet Glaciers through Differential InSAR Measurements, oral, Vienna, Austria
2023	AGU: Unveiling the Hidden Depths - Insights into Basal Melting Beneath Dotson Ice Shelf, West Antarctica, oral, San Francisco, USA
2022	ITGC annual science meeting: A tale of two ice shelves, oral, Boulder, USA
2021	ITGC annual science meeting: Weakening of the pinning point buttressing Thwaites Glacier, oral, online
2020	AGU: Rapid basal melting and destabilization of the Dotson Ice Shelf, oral, online
2020	WAIS workshop: Recent Changes on Thwaites Glacier, oral, online
2019	Northwest Glaciologists Conference: Ice/Ocean dynamic interactions of Ice Sheets and Ice Shelves, Greenland, Antarctica, oral, Corvallis, USA
2019	EGU: Geophysical and in-situ methods for snow and ice studies, oral, Vienna, Austria
2019	Snow and Ice Research Group: Antarctic ice shelves and glaciers, oral, Kurow, NZ
2018	AGU: Advances in Ice Sheet-Ocean interactions: From measurements to climate impacts, poster, Washington DC, USA

### Postgraduate Experiences

- 1. Eight field season in Antarctica and one in Greenland
- 2. Research stays at the British Antarctic Survey, Sept 2022, April 2019
- 3. Invited Talk at the University of Tübingen, April 2019
- 4. Panelist on a discussion about publishing in The Cryosphere, EGU 2019
- 5. Tutor at the Postgraduate Certificate in Antarctic Studies, Antarctica 2018
- 6. Panelist on a discussion about public outreach, IGS 2017
- 7. Participation at the Polar Science Communication Workshop, USA 2017
- 8. APECS representative at the CliC steering committee meeting, Wellington 2017
- 9. Senior teaching assistant for a 4th year remote-sensing class as well as several guest lectures on land and sea ice dynamics at the University of Canterbury
- 10. Participation at the Karthaus Summerschool on Ice Sheets and Glaciers in the Climate System, Italy 2015

### Additional Skills

#### Computer Literacy

- 1. Operating systems: Linux (Ubuntu), Windows
- 2. Programming languages: Python, Matlab
- 3. Specialist software: GAMMA Remote Sensing (SAR interferometry and speckle tracking using satellite data from TerraSAR-X and Sentinel 1a/b as well as terrestrial radar data), ENVI (cosi-corr using ASTER images to detect ice motion), GPR systems (IceRadar, GSSI, pulseEKKO), COMSOL Multiphysics (finite-element simulations), ISSM (diagnostic inversion of rheology and basal friction), ParaView (plotting of big data), PPP GPS data processing, TTide (harmonic analysis), various global and regional tide models, QGIS (spatial analysis)

### Other

- 4. Pre Hospital Emergency Carer with applied first-aid experiences
- 5. FAA-licensed drone pilot with flight experience in Greenland and Antarctica
- 6. Offshore sailing experiences in New Zealand and Australia
- 7. Mountain safety and crevasse rescuing courses
- 8. John Muir Trail thru-hiker in 2017
- 9. Appendix removed in 2006

### Languages

German: mother-tongue

English: fluent written and spoken Italian/Spanish: conversational basics

### Personal Interests

Mountain and water sports

Places visitied in a scientific or educational context.

