Prof. Dr. Benjamin D. Stocker

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Education

- Nov. 2009- PhD Climate Sciences at Climate- and Environmental Physics, University of Bern, Climate Forcings and Feedbacks from the Terrestrial Biosphere From Greenhouse-Gas Emissions to Anthropogenic Land Use Change
 Supervised by Prof. Fortunat Joos, date obtained: 13. Dec. 2013
 Sep. 2007- MSc Climate Sciences at Climate- and Environmental Physics, University of Bern, Transient Simulations of Land Use Change in the Holocene Separating the Human Impact from Natural Drivers of the Carbon Cycle
 Supervised by Prof. Fortunat Joos, date obtained: 16. Nov. 2009
- **Jun. 2006** Undergraduate in Geography (120 ECTS) with a Minor (60 ECTS) in **Physics**, and a complementary (15 ECTS) in **General Ecology**, University of Bern

Employment

- Since Aug. Associate Professor for Geocomputation and Earth Observation, Institute of Geography, 2025 University of Bern, Switzerland
- Aug. 2022 Assistant Professor (Tenure Track) for Geocomputation and Earth Observation, Institute
 Jul. 2025 of Geography, University of Bern, Switzerland
- Sep. 2019 Assistant Professor (non-Tenure Track) for Computational Ecosystem Science,

 Jul. 2022 Department for Environmental Systems Science, ETH Zürich, and WSL Birmensdorf
- **Jul. 2022** Department for Environmental Systems Science, ETH Zürich, and WSL Birmensdorf, Switzerland
- **Apr. 2019- Visiting Scholar** with Prof. Robert Jackson, Department of Earth System Science, Stanford **Aug. 2019** University, USA
- Mar. 2017- Marie Skłodowska-Curie Postdoctoral Research Fellow with Prof. Josep Peñuelas, Ecological and Forestry Applications Research Centre (CREAF), Barcelona, Spain
- **Sep. 2016- Postdoctoral Researcher** with Prof. S. Seneviratne, Department for Environmental Systems **Feb. 2017** Science, ETH Zürich, Switzerland
- Mar. 2014- Postdoctoral Research Fellow, with Prof. I. C. Prentice, Department of Life Sciences, Aug. 2016 Imperial College London, U.K.
- **Jan.-Feb. Postdoctoral Researcher** with Prof. F. Joos, Climate- and Environmental Physics, **2014** University of Bern.

Approved research projects (Chronological order)

- [Co-applicant] SNF Agora, Biotinkering for Youth Robotics and digital learning in plant science engagement; Swiss National Science Foundation, 2.5 years, Apr. 2021 Sep. 2023, 200 kCHF (approx. 182 kEUR). This funds outreach activities on robotics and digital learning for plant sciences which I co-create with co-applicants.
- [Co-PI] Virtual Earth System Research Institute, LEMONTREE Land Ecosystem Models based On New Theory, obseRvations, and ExperimEnts; Schmidt Futures, 5 years, Jan. 2021 Dec. 2025, 10 mio. US\$ (approx. 9 mio. CHF). This funds a postdoc (3 yr) and a PhD (3 yr) in my group.
- [co-PI] WSL Internal Innovative Project, Increasing cold stress on photosynthesis in a warming world? Granted Aug. 2019, 60 kCHF (approx. 56 kEUR) [WSL internal project]. This funds a postdoc (Y. Luo), cosupervised by Prof. A. Gessler (WSL) and myself.

• [PI] SNF Eccellenza Professorial Fellowship, MIND - developing next-generation Modelling approaches for simulating processes in the terrestrial biosphere by Including New Data streams and optimality approaches; Swiss National Science Foundation, 60 months, Sep. 2020 - Aug. 2024, total 1.8 mio. CHF (approx. 1.6 mio. EUR). This funds my salary, 3 yr postdoc, and two 4-yr PhD in my group.

Supervision and mentoring

- Current PhD: Ananda Kurth (starting Feb. 2025)
- Current external PhD, co-supervised: Lara Oxley, Uni. Bern; Samantha Biegel, ETH AI Center; Gabriela Sophia, MPI-BGC Jena, Germany, start in July 2021; Myriam Terristi, MPI-BGC Jena, Germany
- Current Postdocs: Laura Marqués, 2019-present; Yousra El-Mejjaouy, 2023-present
- Current MSc: Patricia Helpap, Ting Tan
- Current BSc: Nils Huber, Anna Grossmann, Timo Trinidad
- Past PhD: Yunke Peng, 2020-2023; Francesco Giardina, 2020-2024
- Past MSc: Pascal Schneider, 2021-2022; Martina Buck, 2021-2022; Didem Durukan, 2022-2023 (Uni Zürich, IBM Research); Sélène Ledain, 2022-2023 (EPFL Lausanne, IBM Research); Jiarui Wu (ETH Zürich); Nour El-Ajou, 2023-2024; Francesco Grossi, 2024
- Past BSc: Patricia Gribi
- Past MSc, external and co-supervision: Gioele Piatti, 2021-2022; Fabienne Meier, 2020-2021; Paula Casadei, 2018-2019; Fabian Feissli, 2011
- Past postdocs: Di Tian, 2020-2021; Yungpeng Luo, 2021-2023; Koen Hufkens, 2021-2024; Jaideep Joshi, 2022-2024

Teaching

- Land in the Earth System 1, 2, lecturer and author of book (UniBe, https://geco-bern.github.io/les/)
- Applied Geodata Data Science 1, 2, lecturer and author of tutorials (UniBe, https://gecobern.github.io/agds/, https://gecobern.github.io/agds2_course/)
- Environmental Systems Data Science, lecturer and author of tutorials (ETHZ, autumn 2020, 2021, tutorial available at https://stineb.github.io/esds_book/)
- Global Change Biology, lecturer, for MSc in Environmental Sciences and MSc in Agronomy, ETH Zürich (spring 2020, 2021, 2022)
- Data Science Lab, guest-lecturer, for MSc in Computer Science, ETH Zürich (spring and autumn 2021)

Professional service, panel memberships, and reviewing

- Associate Editor for Biogeosciences
- Steering Committee Member SwissForestLab
- **PhD jury member:** Marcos Fernández-Martínez, UAB Barcelona, Spain (Jan. 2016); Wantong Li, Universität Dresden, Germany (Jun. 2023)
- Reviewer for grant proposals: ERC Consolidator Grant Call 2018, French National Science Foundation (ANR) AAPG2022, UK NERC Large Grant Scheme 2024, Max Planck Society 2025
- **Guest Editor** for *Biogeosciences* Special Edition "Ecosystem experiments as a window to future carbon, water, and nutrient cycling in terrestrial ecosystems"
- Completed peer reviews for journals: Nature (5), Science (2), Nature Geoscience (4), Nature Clim. Change (1), New Phyt. (5), Glob. Change Biol. (5), Geosci. Mod. Dev. (5), Biogeosciences (10), J. of Climate (1), Earth System Dynamics (1), Env. Research Lett. (1), Geophys. Research Lett. (1), Glob. Biogeochem. Cycles (1), Earth and Planetary Science Lett. (1), J. of Geophys. Research Biogeosciences (1), Earth's Future (1), AGU Advances (2), Remote Sens. of the Env. (1), Communications Earth & Environment (1)

Organisation of conferences

- Conferences and symposia: Zurich-Basel Plant Science Center Symposium, Dec. 2021; Missing links in drought research, Mar. 2025
- Workshops: Terrestrial nitrogen cycling in Earth system models revisited, UK, Feb. 2016; Palaeoclimate experiments to evaluate the impact of LULC on climate and the carbon cycle: a joint co-design workshop of the PAGES LandCover6ka WG and the Palaeoclimate Modelling Intercomparison Project, Sep. 2018
- Conference sessions: EGU 2018, 2019, 2020, 2021, 2022, 2023, 2023, 2024; SIBECOL 2019; PAGES OSM 2017; INQUA 2015

Awards and fellowships

- [Fellow] Marie Sklodowska-Curie Actions Individual Fellowship, Mar. 2017-Feb. 2019, project number H2020-MSCA-IF-2015-701329 FIBER, total 158 kEUR (approx. 181 kCHF)
- [Offered Fellowship] Incoming PEGASUS Fellowship, granted by the Flemish Science Foundation (FWO), 36 months, July 2016. Not accepted due to acceptance of the MSCA Fellowship (see above).
- **[Fellow] SNF Early Postdoc.Mobility scholarship**, Swiss National Science Foundation, 18 months, Mar. 2015 Aug. 2016, project number P2BEP2_158964, total 63 kEUR (72 kCHF).
- Faculty prize for best Master's thesis at the Physics Institute, University of Bern, obtained Feb. 2010