



PERSONAL INFORMATION

- Born: 1970
- Citizenship: U.S.A., Permanent German work & living permit
- Residence: Schongauerweg 4, Tübingen, 72076, Germany
- Family Status: Married with two children

EDUCATION

UNIVERSITY OF UTAH, SALT LAKE CITY, UTAH, USA

2001 Ph.D. in Geophysics (Solid Earth Geophysics)

1997 M.Sc. in Geology (Sedimentology)

1996 M.Sc. in Geophysics (Geodynamics, tectonics)

CALVIN COLLEGE, GRAND RAPIDS, MICHIGAN, USA

1993 Bachelor of Science (B.Sc.) Degree in Geology, Mathematics emphasis

RESEARCH INTERESTS

Director of the [Earth System Dynamics \(ESD\) research group](#), Univ. Tübingen:

- **Research themes:**
 - Tectonic, (paleo)climate, and biotic controls on topography
 - Active tectonics and geodynamic processes
 - Glacial erosion and topographic development
- **Techniques used:**
 - Chemistry and microscope laboratories for: cosmogenic nuclides (^{10}Be , ^{26}Al , ^{36}Cl), thermo- and geochronology (apatite and zircon fission-track, (U-Th-Sm)/He, and U-Pb)
 - Coupled numerical modeling with landscape evolution, (paleo)climate, dynamic vegetation, and lithosphere geodynamic models
 - Fieldwork
 - Near-surface geophysics
 - Terrestrial, UAV, and satellite remote sensing

CURRENT POSITIONS

UNIVERSITY OF GLASGOW, SCOTLAND, UK

2023 - Present Professor, School of Geography and Earth Sciences, University of Glasgow, UK

2023 - Present Head of School, School of Geography and Earth Sciences, University of Glasgow, UK

2023 - Present Speaker for German Priority Program (SPP) 1803, *EarthShape: Earth Surface Shaping by Biota* (www.earthshape.net)

2023 - Present University co-director for 'HUB 1 Climate, Environment, and Energy' activities in the development of: *A European Civic University* (www.civis.eu) - in collaboration with 9 European Universities.

2023 - Present Visiting Distinguished Professor, Department of Earth Sciences, Zhejiang University, China

PREVIOUS POSITIONS**UNIVERSITY OF TÜBINGEN, GERMANY**

- 2009 - 2023 W3 (Full) Professor of Geology, Department of Geosciences, University of Tübingen, Germany
- 2016 - 2023 Speaker for German Priority Program (SPP) 1803, *EarthShape: Earth Surface Shaping by Biota* (www.earthshape.net)
- 2019 - 2023 Leader for the development of University Cluster of Excellence - *TERRA: Center for Terrestrial Geo-Biosphere Research* at the University of Tübingen, Germany
- 2020 - 2023 University co-director for 'HUB 1 Climate, Environment, and Energy' activities in the development of: *A European Civic University* (www.civis.eu) - in collaboration with 9 European Universities.
- 2018 - 2023 Associate member in the Cluster of Excellence for [Machine Learning in Science](#), University of Tübingen, Germany
- 2019 - 2023 Visiting Distinguished Professor, Department of Earth Sciences, Zhejiang University, China
- 2017 - 2020 Chairperson (Speaker), Department of Geosciences, (including Institutes for Geology, Applied Geology, Geography, and Early Human History), University of Tübingen, Germany

UNIVERSITY OF MICHIGAN, USA

- 2007 - 2009 Associate Chair and curriculum director, Department of Geological Sciences
- 2007 - 2009 Associate Professor (with early tenure) and Edman Faculty Fellow. Department of Geological Sciences
- 2003 - 2007 Assistant Professor and Edman Faculty Fellow. Department of Geological Sciences

CALIFORNIA INSTITUTE OF TECHNOLOGY, PASADENA, USA

- 2001 - 2002 Geology Prize Postdoctoral Fellow. Division of Geologic and Planetary Sciences

EXXON EXPLORATION COMPANY, HOUSTON, TEXAS

- 1998 Geophysicist - Global Studies Research Group.

HONORS AND AWARDS

- 2021-2022 Moore Distinguished Scholar, California Institute of Technology, USA
- 2018 Elected member [Academia Europaea](#) (European Academy of arts, sciences, law, and humanities).
- 2018 [Ralph Alger Bagnold Medal](#) from the European Geosciences Union (EGU).
- 2018 Senior Research Fellowship (COFUND), Durham University, UK.
- 2014, 2016-2019 *Golden Hammer* teaching award. Best course (Introduction to Geology) taught in Department of Geosciences, University of Tübingen.
- 2014 European Research Council ([ERC](#)) [Consolidator award](#)
- 2009 Elected Fellow, [Geological Society of America](#)
- 2003 - 2007 John and Betty Edman Faculty Fellow, University of Michigan
- 2001 - 2002 Geology Prize Postdoctoral Fellowship, California Institute of Technology
- 1999 Outstanding Ph.D. Student, University of Utah, Department of Geology and Geophysics
- 1995, 1997 University Teaching Assistant Fellow, University of Utah

SERVICE**UNIVERSITY TÜBINGEN, GERMANY**

- 2017 - 2020 Chair (Sprecher), Department of Geosciences, (including institutes for Geology, Applied Geology, Geography, and Early Human History; including ~450 employees, ~1,000 students, and 35 professors), University of Tübingen, Germany
- 2019-2020 Leader and initiator of cluster hire for four W3 professorships in terrestrial geo-biosphere interactions.

EDITORIAL SERVICE

- 2013 - Present Board of review editors, [Science](#), American Association for the Advancement of Science

- 2022 - Present Guest editor for inter-journal open access special issue on [Earth surface shaping by biota](#), Copernicus (EGU) Journals: *Earth Surface Dynamics*, *Biogeosciences*, *Earth System Dynamics*, *Soil*, *Earth System Science Data*.
- 2009 - 2013 Editor in Chief, [Tectonics](#), American Geophysical Union
- 2006 - 2010 Editor in Chief, [Earth Science Reviews](#), Elsevier
- 2005 - 2009 Associate Editor, *Tectonics*, American Geophysical Union
- 2005 Co-Editor for Reviews in Mineralogy and Geochemistry book on '[Low-Temperature Thermochronology](#)'
- 2005 Guest editor for two issues of *Earth Surface Processes and Landforms*

SCIENTIFIC COMMUNITY

- 2023- Present Advisor Board for *GOTHECA - Glacier impacts on the hydrological systems in Europe and Central Asia*. Norwegian University of Science and Technology and Chilean Science Foundation (<https://www.gotheca.com/>)
- 2018 - 2021 Member of the European Geosciences Union Ralf Alger Bagnold Medal committee
- 2017 - 2023 Member of the German Science Foundation (DFG) Senate Commission for the future of Earth System Science research
- 2017 - Present Member of the Steering Committee for the DFG-SPP [4DMB - Mountain building in 4D](#).
- 2014 - Present Co-coordinator and speaker for DFG-SPP [EARTHSHAPE: Earth Surface Shaping by Biota](#)
- 2014 - 2017 Member of the German Science Foundation (DFG) Senate Commission for the future of Geoscience research (SK ZAG, 'Geocommission').
- 2013 German Science Foundation (DFG) panel member
- 2007 - 2009 US National Academy of Sciences / National Research Council committee member and co-author for NRC report on 'Challenges and Opportunities in Earth Surface Processes'
- 2008 - 2009 US National Science Foundation panel member - Earth and Atmospheric Sciences (EAR)
- 2009 - 2012 Computational Infrastructure for Geodynamics, Long Term Tectonics Group Leader
- 2007 - 2009 Steering committee for ISES (Integrated Solid Earth Sciences)
- 2006 US National Science Foundation panel member - Division of Mathematics (DMS)

UNIVERSITY OF MICHIGAN, USA

- 2007 - 2009 Associate Chairperson, Department of Geological Sciences
- 2008 - 2009 Co-chair of global change cluster faculty search (5 professorships)
- 2007 - 2009 Strategic/long-term planning committee, Department of Geological Sciences
- 2003 - 2005 Executive committee, Department of Geological Sciences

CONVENER OF CONFERENCES, SESSIONS, AND SHORT COURSES

- 2018 Co-convener for German Academy of Sciences (Leopoldina) international symposium on Earth surface shaping by biota, Halle Germany
- 2014 Workshop on Earth surface processes co-coordinator, Tübingen, Germany
Workshop on Remote Sensing and Geo- Thermochronology, GFZ Potsdam Germany
- 2012 - 2013 Geologische Vereinigung (German Geological Society) 2013 annual meeting organizer, Tübingen, Germany
- 2013 Himalaya Karakorum Tibet (HKT) and International Symposium on Tibetan Plateau conference co-coordinator. Tübingen, Germany
- 2011 Symposium convener on 'Tectonic Geomorphology and Landscape Evolution', European Geosciences Union annual meeting
- 2008 International thermochronology conference (FT2008) science steering committee
- 2008 Symposium convener on 'Climate and Tectonic Controls on Landscape Evolution', European Geosciences Union annual meeting
- 2007 Symposium convener on 'Geochemical Constraints on the Topographic Evolution of Cenozoic Orogens', Goldschmidt Conference
- 2005 Co-leader for Mineralogical Society of America Short course on 'Low-Temperature Thermochronology'
- 2004 Symposium convener on 'Interactions Between Exhumation, Climate, and Orogenic Growth Processes', American Geophysical Union annual meeting

- 2003 Symposium convener on 'Quantifying Rates of Geomorphic Processes', American Geophysical Union annual meeting
- 2003 Symposium convener on 'Uplift, Mountain Building, Denudation, and Climate', joint European Geoscience and American Geophysical Union annual meeting
- 1999 Symposium convener on 'Erosion of Active Mountain Belts: Constraints and Models', American Geophysical Union annual meeting
- 1997 Field trip leader, 'Proterozoic Tidal, Glacial, and Fluvial Sedimentation in Big Cottonwood Canyon, Utah', Geological Society of America Annual Meeting

EXAMINER FOR OTHER UNIVERSITIES

- 2017 External Examiner, Ph.D. Thesis, Nevena Andric, Utrecht University, The Netherlands.
- 2017 External Examiner, Ph.D. Thesis, Gwladys Govwin, Lancaster University, UK
- 2017 External Examiner, Ph.D., Thesis, Andrea Madella, University of Bern, Switzerland
- 2017 External Examiner, Ph.D., Thesis, Patricia Eugster, University of Potsdam, Germany
- 2014 External Examiner, Ph.D. Thesis, Mélanie Noury, University Grenoble, France.
- 2013 External Examiner, Ph.D. Thesis, Rafael Caduff, University Bern, Switzerland.
External Habilitation Examiner, Dr. Jean-Daniel Champagnac, University Grenoble, France.
- 2012 External Examiner, Ph.D. Thesis, Matt Fox, ETH, Zurich, Switzerland.
- 2012 Habilitation Examiner, Dr. Uwe Kroner, Technische Universität Bergakademie, Freiberg, Germany
- 2011 Rapporteur, Ph.D. Thesis, Pierre Valla, Université de Grenoble, France
- 2011 Rapporteur, Ph.D. Thesis, Simon Labric, Université de Lausanne, Switzerland
- 2007 External Examiner, Ph.D. Thesis, Taylor Schildgen, Massachusetts Institute of Technology, USA
- 2006 External Examiner, Ph.D. Thesis, Kate Huntington (nee Ruhl), Massachusetts Institute of Technology, USA
- 2005 External Examiner, Ph.D. Thesis, Frederic Herman, Australian National University, Australia

VISITORS HOSTED - ALEXANDER VON HUMBOLDT FOUNDATION

- 2019 - 2021 Dr. Alexander Koptev (Postdoctoral Fellow)
- 2018 - 2020 Dr. Pengfei Li (Postdoctoral Fellow)
- 2016 - 2017 Professor Becky Flowers (University of Colorado, USA)
- 2016 - 2017 Dr. Karl Lang (Postdoctoral Fellow)
- 2012 - 2013 Professor Rebecca Bendick (University of Montana, USA)
- 2011 - 2012 Professor Nadine McQuarrie (Princeton University, USA)
- 2009 - 2010 Professor Christopher J. Poulsen (University of Michigan, USA)

INVITED LECTURES

- 2023 Keynote speaker for Community Surface Dynamics Modelling System ([CSDMS](#)) annual meeting, Boulder, Colorado, USA
Plenary speaker for XVI [Chilean Geologic Congress annual meeting](#), Santiago, Chile
- 2022 University of Southern California, Department of Earth Sciences
University of California, Santa Barbara, Department of Earth Sciences
- 2021 California Institute of Technology, Division of Geological and Planetary Sciences
University of California, Los Angeles, Department of Earth, Planetary, and Space Sciences
Keynote speaker for lecture series on *Microbes and Environmental Chemistry: Invisible Actors in Planetary Change*, Bundesanstalt für Materialforschung und -prüfung (BAM)
Keynote speaker for European Geoscience Union (EGU) annual meeting "Meet the Expert" - early career development lecture for young scientists.
Keynote speaker for GeoMod 2020. Analog and numerical modeling conference. Doorn, Netherlands
- 2020 Zhejiang University, China, School of Earth Sciences

- 2019 Machine Learning in Science Cluster of Excellence Meeting, University of Tübingen, Germany.
 European Geosciences Union (EGU) annual meeting session Monsoon systems and climatic tipping points in Asia: past, present, future
 European Geoscience Union (EGU) annual meeting session Dates and Rates: Deciphering and Quantifying Geomorphological Processes and Landscape Dynamics
 Hildgendorf Lecture, University of Tübingen Evolution and Ecology Research School
 Young Geomorphologists Annual Meeting, Giessen, Germany.
- 2018 European Geosciences Union (EGU) annual meeting session *Monsoon systems and climatic tipping points in Asia: past, present, future*
 European Geoscience Union (EGU) annual meeting session *Dates and Rates: Deciphering and Quantifying Geomorphological Processes and Landscape Dynamics*
- 2018 Ralf Alger Bagnold Medal lecture, European Geosciences Union annual meeting, 2018
 ETH Zurich, Switzerland, Department of Geosciences
 GeoForschungsZentrum Helmholtz-Zentrum Potsdam (GFZ), Germany
- 2017 Trinity College, Dublin, Ireland. Department of Geology, School of Natural Sciences
 University of Utrecht, Faculty of Geosciences
 Plenary Lecture - Third Pole Science Summit Meeting, Kunming China. Joint meeting for the CAS Centre for Excellence in Tibetan Plateau Research, China Society on Tibetan Plateau, and the Himalayan-Karakorum-Tibet workshop.
 Plenary Lecture - German Geological Society and Geological Association (DGGV) Annual meeting, Bremen Germany.
 University of Lausanne, Faculty of Geosciences and the Environment, Switzerland
- 2016 University of Bonn, Germany, Department of Geography
- 2015 University of Toulouse, France, Geosciences Environment Toulouse (GET) Department
- 2014 University of Bristol, UK, School of Earth Sciences
 University of Copenhagen, Denmark
- 2013 TOPO-Europe 'Limocello Keynote Lecture', Certosa di Pontignano, Italy.
 Geological Society of America Annual Meeting, Denver, USA
 Short course on 'An Introduction to the theory and methods of (U-Th)/He thermochronology'
 University of Colorado, Boulder, USA
 TOPO-Europe Science Planning Meeting, Heidelberg, Germany
 European Geosciences Union meeting, Vienna, Austria
 University of Freiburg, Germany
 University of Göttingen, Germany
- 2012 Frei Universität, Berlin, Germany
- 2011 University of Edinburgh, Scotland.
- 2010 Keynote speaker on Tectonics and Sedimentation, Geologische Vereinigung Meeting, Darmstadt Germany
 GeoMod 2010 Conference on Modeling in Geosciences, Lisbon Portugal
 12th Annual International Conference on Thermochronology, Glasgow, Scotland
 GFZ German Research Centre for Geosciences, Potsdam, Germany
- 2009 Universität Freiberg, Germany
- 2008 Fall American Geophysical Union (AGU) meeting, San Francisco
 Universität Tübingen, Germany
 Stanford University, School of Earth Sciences
 Leibniz Universität Hannover, Germany
 Arizona State University
- 2007 Harvard University
 University of California, Santa Barbara
 Chinese National Academy of Sciences and Peking University, Beijing, China
- 2006 Keynote speaker, Gilbert Club, University of California Berkeley

- Fall American Geophysical Union (AGU) meeting, San Francisco
Ohio State University
Pardee Keynote Symposium, Annual GSA Meeting, Philadelphia
University of Rennes, France
University of Kansas
- 2005 University of Potsdam, Germany
Norwegian Geologic Survey – Goldschmidt Lecture, Trondheim, Norway
Exxon-Mobil Research Lab, Houston, TX
Boston University
- 2004 Princeton University
Michigan State University
University of New Mexico
- 2003 Annual Geologic Society of America Meeting, Seattle
Calvin College, Grand Rapids, Michigan, USA
University of Chicago
University of California Santa Barbara
Cambridge University, England
- 2002 California Institute of Technology
University of California Santa Barbara
Fall American Geophysical Union (AGU) meeting, San Francisco
Goldschmidt Conference, Davos, Switzerland
University of Illinois
- 2001 University of Minnesota
University of Maine

STUDENTS AND RESEARCHERS SUPERVISED**CURRENT POSTDOCTORAL SCHOLARS**

- Dr. Yanqing Shi (Postdoctoral Scholar) 2022-present
Dr. Thomas Bernard (Postdoctoral Scholar) 2022-present
Dr. Al Neely (Postdoctoral Scholar) 2022-present
Dr. Daniel Peifer (Postdoctoral Scholar) 2022-present
Dr. Sarah Falkowski (Postdoctoral Scholar) 2016-present
Dr. Andrea Madella (Postdoctoral Scholar) 2018-present
Dr. Mirjam Schaller (Research Scientist), 2009-present

CURRENT STUDENTS SUPERVISED**PH.D. STUDENTS (T. EHLERS ADVISOR OR CO-ADVISOR):**

- Jonathan Schmidt (Ph.D. candidate in Machine Learning) 2022-present
Daniel Boateng (Ph.D. candidate) 2021-present

BACHELORS AND MASTERS STUDENT RESEARCH SUPERVISED**FORMER ASSISTANTS (CURRENT POSITION IN PARENTHESIS)**

- Dr. Christoph Glotzbach (Lecturer and Research Scientist, University Tübingen), 2016-2023
Dr. Sebastian Mutz (Senior Lecturer, University of Glasgow) 2012-2013, 2014-2023
Dr. Alexander Beer (Lecturer and Research Scientist, University Tübingen) 2019-2023
Dr. Reinhard Drews (Full Professor, University Tübingen) 2016-2022
Dr. Konstanze Stübner (Staff scientist, Helmholtz Zentrum, Dresden, 2013-2016
Dr. Faisal Shahzad (Remote sensing consultant), 2011-2013

Dr. Eva Enkelmann (Professor, University Calgary), 2009-2012

FORMER POSTDOCTORAL SCHOLARS (CURRENT POSITION IN PARENTHESIS)

Dr. Inka Koch (Curriculum coordinator, University of Tübingen) 2022-2023
Dr. Paul Eizenhöfer (Lecturer, University. Glasgow) 2019-2022
Dr. Kirstin Übernicker (project manager, DHV) 2016-2022
Dr. Svetlana Botsyn (Postdoctoral Scholar, FU Berlin) 2017-2021
Dr. Alexander Koptev (Postdoctoral Scholar, GFZ Potsdam) 2017-2021
Dr. Nevena Andric-Tomosavic (Assistant Professor, Univ. Karlsruhe) 2019-2021
Dr. Pengfei Li (Research Scientist, Chinese Academy of Sciences) 2018-2020
Dr. Yingying Jia (Research Scientist, Chinese Academy of Sciences) 2018-2020
Dr. Clemens Schannwell (Postdoctoral Scholar MPI, Hamburg) 2017-2019
Dr. Karl Lang (Assistant Professor, Georgia Tech, Georgia, USA) 2015-2018
Dr. Byron Adams (Research Fellow, University of Bristol) 2014-2017
Dr. Jingmin Li (Postdoctoral Scholar, University of Munich) 2011-2016
Dr. Charlotte Fillon (Scientific Staff, TOTAL) 2012-2013
Dr. Rachel Headley (Associate Professor, Univ. Wisconsin) 2011-2013
Dr. Brian Yanites (Associate Professor, Indiana Univ.) 2009-2012
Dr. Richard Lease (Senior Scientist - USGS) 2011-2012
Dr. Peijun Li (Professor, Department of Mathematics, Purdue) 2007-2008.
Dr. Rasmus Thiede (Heisenberg Postdoc, Geosciences Department, Univ. Kiel, Germany) 2007
Dr. Jeff Rahl (Professor, Washington and Lee University) 2005-2006.
Dr. Greg Stock (Head geologist, Yosemite National Park) 2005

FORMER RESEARCH SUPPORT STAFF

Dagmar Kost (Cosmogenic nuclides, HF technician) 2009-2017 (retired)
Willi Kappler (scientific computing and software engineer, University of Tübingen) 2009-2023
Martina Brenn (cosmogenic nuclides, HF technician, University of Tübingen) 2017-2023
Dorothea Muehlbayer-Renner (thermochronology technician, University of Tübingen) 2009-2023

FORMER STUDENTS SUPERVISED (CURRENT POSITION IN PARENTHESIS)**PH.D. STUDENTS (T. EHLERS ADVISOR OR CO-ADVISOR):**

Hemanti Sharma (Ph.D. candidate) 2018-2022
Matthias Schmidunser (Scientific software engineer) 2013-2021
Manuel Schmid (Scientific software engineer / consultant) 2016-2020
Solmaz Mohadjer (Assistant Professor, Univ. Central Asia) 2013-2020
Lorenz Michel (Postdoc, Univ. Bergen, Norway) 2014-2019
Elena Kiemele (Research laboratory manager) 2012-2019
Jessica Starke (Research laboratory manager) 2014-2019
Xiaohui (Vera) Liu 2017-2018 (Chinese Academy of Sciences)
Karim Norouzi Moghanjoghi 2012-2016 (Assitant Professors, Univ. Tehran)
Sarah Falkowski (Postdoc Univ. Tübingen) 2011-2016
Saeed Madanipour 2011-2013 (Assistant Professor, Tarbiat Modares Univ., Iran)
Louise Jeffery 2008-2012 (Policy analyst, New Climate Institute, Berlin)
Nadja Insel 2005-2010 (Professor, Northeastern Illinois University)
Jason Barnes, 2003-2008 (Former Assistant Professor, University of North Carolina; Senior Scientist, Exponent Consulting)
Matt Densmore, 2003-2008 (California Department of Conservation)
David Whipp, 2003-2008 (Associate Professor, University of Helsinki, Finland)

BACHELORS AND MASTERS STUDENT THESIS RESEARCH SUPERVISED

Jan Micha Zarbock (MSc) 2023
Gabriel Bruetsch (MSc) 2022
Alexa Schoepf (MSc) 2022
Anna-Lena Billing (MSc) 2022
Stefan Neushl (MSc) 2022
Eskil Gross (MSc) 2022
Julius Konietzko (BSc) 2022
Sophie Kunz (BSc) 2022
Jonas Profanter (BSc) 2022
Viktoria Schwarz (BSc) 2022
Heiko Spiegel (BSc) 2022
Gregor Rink (MSc) 2022
Michael Erb (MSc) 2021
Nikolaus Krumrein (MSc) 2021
Matteo Kuenzel (BSc) 2021
Ann-Kathrin Maier (BSc) 2021
Louisa Rother (BSc) 2021
Larissa Werle (BSc) 2021
Jeremias Gloeggler (BSc) 2021
Bertolaza Bitzenhofer (BSc) 2021
Gregor Frisia (BSc) 2021
Zhang Liu (MSc) 2019-present
Yuling Yang (MSc) 2019-present
Brianna Rupkalvis (MSc) 2020
Melanie Finch (MSc) 2020
Jonathan Schmidt (MSc Computer Science) 2021
Simon Ring (MSc) 2021
Daniel Boateng (MSc) 2021
Jason Ching-Sheng Huang (MSc) 2020
Alireza Aghakhani (MSc) 2020
Matthias Schubert (MSc) 2020
Clemens Gacmenga (BSc) 2020
Gabriel Brüttsch (BSc) 2020
Stefan Neuschl (MSc) 2020
Marcel Anhorn (MSc) 2019
Stefan Neuschl (BSc) 2019
Stephanie Schlosser (Bsc) 2018
Anke Schwarz (MSc) 2019
Michael Martin (MSc) 2019
Isabel Zutterkirch (MSc) 2019
Julius Loos (MSc) 2019
Steffen Plath (MSc) 2019
Zhijun Zhou (MSc) 2019
Nyukshan Ang (BSc) 2019
Steffen Plath (MSc) 2019
Michael Erb (BSc) 2018
Jana Kalmbach (BSc) 2018

Rania Alkanzi (MSc) 2019
Lukas Büttner (MSc) 2019
Samuel Scherrer (MSc) 2019
Erik Seiert (MSc) 2019
Benjamin Huber (MSc) 2018
Hemanti Sharma (MSc) 2018
Jana Geller (MSc) 2018
Ilze Muceniece (MSc) 2018
Maximilian Klett (MSc) 2018
Manuel Lieb (MSc) 2018
Marco Benedikt-Ott (MSc) 2017
Nikita Avdievitch (MSc) 2017
Roland Schraven (BSc) 2017
Susila Bhagavathula (BSc) 2017
Susanne Nonnenmacher (BA-geography) 2017
Sven Dannaman (BSc) 2017
Judith Danner (BSc) 2016
Jana Geller (BSc) 2015
Ilze Muceniece (BSc) 2015
Manuel Schmid (MSc) 2013-2015
Mareike Hoffmann (MSc) 2014-2015
Richard Ott (MSc) 2015
Ricarda Gatter (BSc) 2014
Matthias Loose (MSc) 2014
Christian Rexrodt (Diplom thesis) 2014
Gabriel Merli (Diplom thesis) 2014
Josy Strunden (MSc) 2014
Daniel Brehm (MSc) 2013
Manuel Schmid (BSc) 2012
Thomas Wenninger (BSc) 2012
Christoph Bales (BSc) 2012
David Grabowski (MSc.) 2011-2012
Stephanie Olen (M.Sc.) 2008-2010
Annika Szameitat (Diplom) 2010-2011
Martin Mangler (Diplom mapping) 2011
Christian Rexrodt (Diplom mapping) 2011
Jakob Schoenwald (BSc) 2011
Gerard Buck (BSc) 2011
Philipp Widmann (BSc) 2011
Daniel Brehm (BSc) 2010
Erin Bachynski (BSc) 2009
Chris Spath (BSc) 2009
Caitlin Rushlow (BSc) 2009
Eleanor Fuergeson (BSc Honors thesis) 2008-2009
Jessica Zinger (BSc) 2008
Chelsea Snodgrass (BSc) 2007
Jon Butler (BSc) 2007
Jessica Malone (BSc) 2007

Nick Olds (BSc) 2007
 Tehmasp Chaudhri (BSc) 2007
 Santosh Kumar (BSc) 2005
 Alex Bryan (BSc) 2005
 Andrew Feldkamp (BSc) 2005

GRANTS – EXTERNAL FUNDING

PENDING GRANTS (IN REVIEW):

2022 € 295,850 German Science Foundation (DFG) Spatial variations in rockfall preconditioning and triggering from rockwall fracture and weather conditions. Pls. T. Ehlers, A. Beer.

CURRENT RESEARCH GRANTS:

CURRENT TOTAL: € ~5.3M; € ~15.8M INCLUDING EARTHSHAPE SPP FRAMEWORK PROPOSAL

2022 € 406,000, German Science Foundation (DFG Major Research Instrumentation) High Voltage Pulsed Power Fragmentation System. Pls. T. Ehlers.

2022-2024 € ~1,334,000, Bundesgesellschaft für Endlagerung (BGE, German nuclear waste disposal agency), Erosion rates across Germany with a focus on the South German Scarplands - integrating surface analysis, thermochronology, cosmogenic nuclide, and landscape evolution modelling. Pls. T. Ehlers, C. Glotzbach, A. Beer, M. Schaller.

2021-2024 € ~450,000, Machine Learning Cluster of Excellence, (Univ. Tübingen) PIMMs - Probabilistic Inference in Mechanistic Models. Pls., P. Berens, J. Classen, R. Drews, T. Ehlers, P. Henning, J. Macke.

2021-2023 € ~400,000, German Science Foundation (DFG EH329/23-1) Reconstructing eastward propagation of surface uplift in the Alps: Integrating stable isotope palaeoaltimetry and palaeoclimate modeling. Pls. T. Ehlers, S. Mutz, A. Mulch, M. Meijers.

2021-2023 € ~430,000, German Science Foundation (DFG EH329/26-1) Constraining the geodynamic evolution of the Alps with sedimentary provenance and detrital thermochronometer data. Pls L. Stutenbecker, C. Glotzbach, T. Ehlers.

2021-2023 € ~220,000, German Science Foundation (DFG EH329/24-1) Integrated records of tectonic and climate interactions in the Northern Alpine Foreland Basin sedimentary architecture. Pls. N. (Andric) Tomasevic, T. Ehlers

2021-2023 € ~220,000, German Science Foundation (DFG EH329/25-1) Quantifying the effects of mantle processes and climate variability on hinterland denudation in the Central and Eastern Alps since the Oligocene. Pls P. Eizenhöfer, T. Ehlers.

2014-2022 € 10,500,000, German Science Foundation (DFG SPP 1801) Proposal for establishment of a new German priority program (SPP), "EARTHSHAPE: Earth Surface Shaping by Biota", Pls T. Ehlers (contact person), F. von Blanckenburg.

2019-2022 € 225,506 German Science Foundation (DFG EH329/14-2) Bridging Timescales of Climate and Vegetation Change Effects on Denudation: A Coupled Modeling Approach. PI: T. Ehlers. Separate co-PI project by T. Hickler.

2019-2022 € 932,524, German Science Foundation (DFG EH329/17-2) Coordination of the DFG Priority Program 1803 (Phase 2): "EarthShape: Earth Surface Shaping by Biota", PI: T. Ehlers (contact person). Separate co-PI project by F. von Blanckenburg.

2017-2022 € 149,688 German Science Foundation (DFG EH329/19-1): Neogene paleoelevation and paleoclimate of the central Alps - Linking surface processes to lithospheric dynamics PI: T. Ehlers. Separate co-project led by A. Mulch.

2017-2024 € 591,000, German Science Foundation (DFG Major Research Instrumentation, INST 37/1041-1 FUGG) Next Generation Thermochronology: Proposal for a laser ablation equipped Helium extraction and triple dating instrument. PI. T. Ehlers.

OTHER CURRENT EUROPEAN FUNDED GRANTS FROM MEMBERS IN GROUP (EHLERS NOT A PI):

2017-2022 € ~223,952 German Science Foundation (DFG GL724/8-1): Constraining the near-surface response to lithospheric reorientation: Structural thermochronology along the AlpArray geophysical transects. PI: C. Glotzbach

2018-2022 € ~235,288 German Science Foundation (DFG SF/1-1): Tectonic, climate, and erosional controls on Andean plateau incision and width, South Peru. PI: S. Falkowski

PREVIOUS GRANTS (EHLERS AS PI OR CO-PI):

- 2017-2021 € 218,350 German Science Foundation (DFG EH329/18-1): Quantifying the tectonic controls on glaciated topography, Patagonia, South America. PI: T. Ehlers. Separate co-project led by M. Strecker.
- 2017-2020 € 166,689 German Ministry for Research and Education (BMBF 03G0878D) CLIENT II - CaTeNA: Climate and tectonic natural hazards In Central Asia: Investigation of the earthquake and mass wasting hazards.
- 2016-2020 € 246,475 German Ministry for Research and Education (BMBF 03G0863A) CAMEII - Tipping points in lake systems in arid zones of central Asia (Q-Tip): Climate proxies and global climate modelling Subproject , PI: T. Ehlers and E. Appel.
- 2016-2020 € 176,625 German Science Foundation (DFG EH329/13-1) Constraining paleo-dynamics and sediment transport of Antarctic stream flow across grounding lines - from source to sink, PI: T. Ehlers. Separate co-projects led by O. Eisen, C. Mayer.
- 2015-2019 € 2,000,000, European Research Council (ERC CoG 615703), Consolidator Grant. "EXTREME: EXtreme Tectonics and Rapid Erosion in Mountain Environments", PI. T. Ehlers
- 2016-2019 € 525,000, German Science Foundation (DFG EH329/17-1) Coordination of the DFG Priority Program 1803 (Phase I): "EarthShape: Earth Surface Shaping by Biota", PIs: T. Ehlers (contact person).
- 2016-2019 € 228,163 German Science Foundation (DFG EH329/14-1) BioScapes I: Coupled modeling of Climate, Dynamic Vegetation, and Surface Processes From the Last Glacial Maximum to Present PI: T. Ehlers.
- 2012-2015 € 2,035,286, (€ 242,000 Uni Tü) "Tien-Shan-Pamir Monitoring Program: Cenozoic geodynamics, climate interactions, and resulting hazards in Central Asia", German BMBF – Central Asia Program, PIs: H. Echtler, T. Ehlers, U. Linnemann, L. Ratschbacher, M. Strecker.
- 2011-2015 € 265,442, German Science Foundation (DFG) Geology, "Quantifying deformation and erosion at the Yakutat plate corner (SE Alaska) with integrated thermochronology and numerical modeling", PIs T. Ehlers, E. Enkelmann. (EN 941/1-1)
- 2011-2014 € 270,159, German Science Foundation (DFG) TIP SPP 1372, "Bridging timescales of Tibetan Plateau environmental change: An integration of Earth system modeling with modern and paleoenvironmental proxies", PIs T. Ehlers (EH 329/2-1), Separate co-project led by H. Paeth.
- 2011-2014 € 210,000, German Science Foundation (DFG) Geology, "Quantifying paleo-denudation rates with cosmogenic nuclides from European river terraces", PIs M. Schaller, T. Ehlers
- 2013 € 44,000, NAGRA (Swiss Nuclear Waste Disposal Agency), "Quantification of the thermal and exhumation histories of the Benken and Sonnengarten Boreholes, Switzerland", PI T. Ehlers.
- 2010-2013 \$579,707, NSF-Tectonics, "Collaborative Research: Recovering surface uplift histories and climate dynamics of the Cenozoic North American Cordillera through integrated climate modeling, sedimentology, and stable isotopes." PIs P. Chamberlain, C. Poulsen, T. Ehlers, S. Graham, A. Mulch.
- 2009-2013 \$500,929, NSF-CD, "Collaborative Research: CAUGHT: Central Andean Uplift and the Geodynamics of High Topography, PIs T. Ehlers, C. Poulsen.
- 2010-2012 € 135,600, German Science Foundation (DFG) Antarctica SPP 1158, "Quantifying long-term glacial erosion in Antarctica with numerical modeling and thermochronology". PIs T. Ehlers, P. Bons. (EH 329/1-1)
- 2007-2012 \$513,204, NSF-Collaborations in Mathematics and Geosciences, "Collaborative Research: Quantifying Tectonic and Geomorphic Interpretations of Thermochronometer Data With Inverse Problem Theory", PI: T. Ehlers.
- 2008-2012 \$402,183, NSF-EAR, "Quantifying the Cenozoic oxygen isotopic variability of precipitation on the Andes: A test of stable isotope paleoaltimetry and plateau uplift", PIs: T. Ehlers, C. Poulsen.
- 2010-2012 € 161,800, NAGRA (Swiss Nuclear Waste Disposal Agency), "Landscape evolution modeling of Northern Switzerland (LENS)", PI T. Ehlers.
- 2009 € 415,000, "Struktur und Innovationsfonds Baden-Württemberg", Stiftung Baden-Württemberg, Germany
- 2008-2010 \$191,475, Graham Environmental Sustainability Institute, "Integration of physical and social sciences for development of a sustainable water resource policy in Bolivia, South America, PIs: C. Poulsen, T. Ehlers, M. Lemos, A. Steiner.
- 2008-2009 \$5,000, UofM LSA-ITC Faculty Grant, "Video Bites – A new tool for more vivid Earth science education, PI: T. Ehlers.

- 2006-2009 \$147,230, NSF-Geomorphology, "Quantifying spatial distribution of erosion rates and relief change with detrital apatite (U-Th)/He thermochronology and cosmogenic isotopes of modern river sediments" PIs: T. Ehlers and G. Stock.
- 2003-2008 \$93,000, Swiss National Science Foundation, "Quantifying weathering rates and soil ages in a glacial chronosequence: Wind River Mountains, Wyoming, USA," PIs: M. Schaller, J. Blum, T. Ehlers.
- 2004-2008 \$298,879, NSF – Tectonics panel, "When did the Altiplano Form? A Coupled Thermochronometer and Numerical Model Test" PI: T. Ehlers
- 2006-2007 \$21,027, NSF-SGER, "Exploratory thermochronology of synorogenic deposits as a new tool to constrain the long-term erosional history of mountain belts" PIs T. Ehlers, B. van der Pluijm, J. Rahl.
- 2003-2006 \$270,000, NSF –Geology and Paleontology panel, "Quantifying Glacial Erosion Rates, Magnitudes, and Paleotopography, Coast Mountains British Columbia" PI: T. Ehlers
- 2005 \$10,000, NSF- Tectonics, Petrology and Geochemistry panels, Request for joint sponsorship of short course on Low-Temperature Thermochronology. PI: T. Ehlers
- 2004-2005 \$61,627, NSF – Continental Dynamics, "Geomorphic and Geodynamic Coupling at the Orogen Scale: A Himalayan Transect in Central Nepal," PI: T. Ehlers.

PUBLICATIONS

PUBLICATION METRICS

[Google Scholar](#) 6.2023

Total number of citations: ~9,600

Hirsch (H) index = 53

I10-index = 134

ISI Web of Science 6.2023 (author search as Ehlers, TA; [ORCID 0000-0001-9436-0303](#))

Total number of publications: 181

Total number of citations: ~6,900

Hirsch (H) index = 46

Average H index growth rate since the year of Ph.D. = 2.0 / yr.

MOST IMPORTANT PUBLICATIONS (EHLERS IN LEADING OR SENIOR AUTHOR ROLE)

* = Student author

^= Postdoctoral scholar author

- Ehlers, T.A.**, 2023. Landscapes through time, *Science*, 379, 879-880 <https://doi.org/10.1126/science.adg5546>
- Ehlers, T.A.**, Chen, D., Appel, E., Bolch, T., Chen, F., Diekmann, B., et al., 2022. Past, present, and future geo-biosphere interactions on the Tibetan Plateau and implications for permafrost. *Earth-Science Reviews*, 234, 104197. <https://doi.org/10.1016/j.earscirev.2022.104197>
- ^Madella, A., and **Ehlers, T.A.**, 2021, Background seismicity contributes to forearc surface uplift, *Nature Geoscience*, 14, pp. 620-625, <https://doi.org/10.1038/s41561-021-00779-0>
- *Starke, J., **Ehlers, T.A.**, ^Schaller, M., 2020, Latitudinal effect of vegetation on erosion rates identified along western South America, *Science*, 367, 1358-1361, doi.org/10.1126/science.aaz0840
- *Whipp, D., and **Ehlers, T.A.**, 2019, Quantifying landslide frequency and sediment residence time in the Nepal Himalaya, *Science Advances*, 5, doi.org/10.1126/sciadv.aav3482
- Herman, F., Seward, D., Valla, P.G., Carter, A., Kohn, B., Willett, S.D., **Ehlers, T.A.**, 2013, Worldwide acceleration of mountain erosion under a cooling climate, *Nature*, v. 504, 423-426. <https://doi.org/10.1038/nature12877>
- ^Lease, R.O., and **Ehlers, T.A.**, 2013, Incision into the eastern Andean Plateau during Pliocene cooling, *Science*, v. 341, 774-776. <https://doi.org/10.1126/science.1239132>
- Poulsen, C.J., **Ehlers, T.A.**, *Insel, N., 2010, Onset of convective rainfall during gradual Late Miocene rise of the Central Andes, *Science*, v. 328, 490-493. <https://doi.org/10.1126/science.1185078>
- Ehlers, T.A.**, and Poulsen, C.J., 2009, Influence of Andean uplift on climate and paleoaltimetry estimates, *Earth and Planetary Science Letters*, v. 281, pp. 238-248. (Selected as a Science magazine Editor's Choice article, 2009, v. 324, p. 857). <https://doi.org/10.1016/j.epsl.2009.02.026>
- Ehlers, T.A.**, Farley, K.A., Rusmore, M.E., Woodsworth, G.J., Apatite (U-Th)/He signal of large magnitude and accelerated glacial erosion: southwest British Columbia, *Geology*, v. 34, 765-768. <https://doi.org/10.1130/G22507.1>
- Shuster, D., **Ehlers, T.A.**, Rusmore, M.R., Farley, K.A., 2005, Rapid glacial erosion at 1.8 Ma revealed by ⁴He/³He thermochronometry, *Science*, v. 310, 1668-1670. <https://doi.org/10.1126/science.1118519>
- Ehlers, T.A.**, 2005, Crustal thermal processes and thermochronometer interpretation. *Reviews in Mineralogy and Geochemistry*, v. 58, 315-350. <https://doi.org/10.2138/rmg.2005.58.12>
- Reiners, P.W., **Ehlers, T.A.**, *Gran-Mitchell, S., Montgomery, D.R., 2003, Coupled spatial variations in precipitation and long-term erosion rates across the Washington Cascades, *Nature*, v. 426, 645-647. <https://doi.org/10.1038/nature02111>
- Ehlers, T.A.**, and Farley, K.A., 2003 (Invited), Apatite (U-Th)/He Thermochronometry: methods and applications to problems in tectonics and surface processes, *EPSL-Frontiers*, v. 206, pp. 1-14. (Article listed on the 'Top 25 Hottest' (top cited) articles for EPSL since 2010.) [https://doi.org/10.1016/S0012-821X\(02\)01069-5](https://doi.org/10.1016/S0012-821X(02)01069-5)

BOOKS

2005

Reiners, P.W., and Ehlers, T.A. (Editors), 2005, [Low-Temperature Thermochronology: Techniques, Interpretations, and Applications](#), Mineralogical Society of America, *Reviews in Mineralogy and Geochemistry*, Washington D.C., v. 58, 22 chapters, 622 p.

2009

(alphabetical) L. Blum, S. Brantley, A. Chin, B. Dietrich, T. Dunne, T. Ehlers, E. Eide, J. Eno, R. Fu, K. Whipple, 2009, [Landscapes on the Edge: New Horizons for Research on the Earth's Surface](#). US National Academy of Sciences / National Research Council, Washington D.C. 132 p.

PUBLICATIONS IN REVIEW OR REVISION

* = Student author

^= Postdoctoral scholar or staff lead author contribution

*Sharma, H., and **Ehlers, T.A.**, 2022 (In Review) Effects of seasonal variations in vegetation and precipitation on catchment erosion rates along a climate and ecological gradient: Insights from numerical modeling, *Earth Surface Dynamics*,

Yao, Y., Li, X., Cheng, G., Jin, H., Zeng, Z., Cheng, H., Chen, D., Luo, D., Ran, Y., Shi, F., Liang, S., Zhao, Y., Li, G., Wang, Z., Ma, Q., **Ehlers, T.A.**, 2023 (In Review), Emerging permafrost tipping points in the eastern Tibetan Plateau, *Science*

Eizenhöfer, P.R., McQuarrie, N., Ghoshal, S., Mutz, S.G., **Ehlers, T.A.**, 2023 (In Review), Drivers of topography in fold-thrust belts: A perspective from Central Nepal, *Geology*

^Falkowski, S., **Ehlers, T.A.**, McQuarrie, N., Buford Parks, V.M., Glover, C., Cárdenas, J., 2023 (In Review) Exhumation and incision of the eastern Central Andes, southeastern Peru: Low-temperature thermochronology observations, *Earth and Planetary Science Letters*

^Buford Parks, V.M., McQuarrie, N., Glover, C., Perez, N., **Ehlers, T.A.**, 2023 (In Review), Timing and drivers of exhumation and sedimentation in the eastern Peruvian Andes: Insights from thermokinematic modelling, *Earth and Planetary Science Letters*

Glover, C.O., McQuarrie, N., Falkowski, S., **Ehlers, T.A.**, 2023 (In Review), Assessing drivers of high exhumation magnitudes and young cooling ages in the eastern Central Andes, southern Peru (13-18° S), *Earth and Planetary Science Letters*

Han, W., Appel, E., ^Botsyun, S., ^Mutz, S.G., **Ehlers, T.A.**, Fang, X., Zhang, T., Rösler, W., Yang, Y., Lü, Shuang, 2021 (In Revision), Astronomical forcing of major climatic transition at 4.2 Ma in the Asian interior, *Geophysical Research Letters*

*Boateng, D., Mutz, S.G., Ballian, A., Meijers, M.J., Methner, K., Botsyun, S., Mulch, A., **Ehlers, T.A.**, 2022 (In Review), The effects of diachronous surface uplift of the European Alps on regional climate and the isotopic composition of precipitation, *Climate of the Past*.

PUBLICATIONS (PEER-REVIEWED, ISI WEB OF SCIENCE LISTED)

* = Student author

^= Postdoctoral scholar or staff lead author contribution

2023

Ehlers, T.A., 2023. Landscapes through time, *Science*, 379, 879-880 <https://doi.org/10.1126/science.adg5546>

Sacek, V., Mutz, S.G., **Ehlers, T.A.**, Bicudo, T.C., de Almeida, R.P., 2023, Amazon modern and paleoenvironment resulted from coupled Geodynamic, paleoclimate, and sea-level interactions, *Earth and Planetary Science Letters*, 605, 118033, <https://doi.org/10.1016/j.epsl.2023.118033>

^Eizenhöfer P.R., Glotzbach, C., Kley, J., **Ehlers, T.A.**, 2023, Thermo-kinematic evolution of the Eastern European Alps along the TRANSALP transect, 42, e2022TC007380, *Tectonics*, <https://doi.org/10.1029/2022TC007380>

^Andrić-Tomašević, N., Koptev, A., Maiti, G., Gerya, T., **Ehlers, T.A.**, 2023, Lithospheric tearing response to variable slap retreat velocities in non-collisional settings: Insights from thermomechanical modelling of oblique subduction, 610, 118097, *Earth and Planetary Science Letters*. <https://doi.org/10.1016/j.epsl.2023.118097>

Cloetingh, S., Sternai, P., Koptev, A., **Ehlers, T.A.**, Gerya, T., Kovács, I., Oerlemans, J., Beekman, F., Laval-lée, Dingwell, D., Békési, E., Porkaláb, K., Tesauro, M., Lavecchia, A., Botsyun, S., Muller, V., Roure, F., Serpelloni, E., Matenco, L., Castellort, S., Limberger, J., 2023 (In Press), Coupled surface to deep Earth processes: Perspectives from TOPO-EUROPE with an emphasis on climate- and energy-related societal challenges, 226, 104140, *Global and Planetary Change*, <https://doi.org/10.1016/j.gloplacha.2023.104140>

2022

Ehlers, T. A., Chen, D., Appel, E., Bolch, T., Chen, F., Diekmann, B., et al., 2022. Past, present, and future geo-biosphere interactions on the Tibetan Plateau and implications for permafrost. *Earth-Science Reviews*, 234, 104197. <https://doi.org/10.1016/j.earscirev.2022.104197>

^Schaller, M., and **Ehlers, T.A.**, 2022, Comparison of soil production, chemical weathering, and physical erosion rates along a climate and ecological gradient (Chile) to global observations, *Earth Surface Dynamics*, 10, 131-150, <https://doi.org/10.5194/esurf-10-131-2022>

^Botsyun, S., **Ehlers, T.A.**, Koptev, A., Böhme, M., Methner, K., Risi, C., Stepanek, C., Mutz, S.G., Werner, M., Boateng, D., Mulch, A., 2022, Middle Miocene climate and stable oxygen isotopes in Europe based on numerical modeling, *Paleoceanography and Paleoclimatology*, 37, <https://doi.org/10.1029/2022PA004442>

*Sharma, H., Mutz, S.G., **Ehlers, T.A.**, 2022 (in Press), The effects of Late Cenozoic Climate Change on the global distribution of frost cracking, *Earth Surface Dynamics*, 10, 997-1-15, <https://doi.org/10.5194/esurf-10-997-2022>

*Ring, S.J., ^Mutz, S.G., **Ehlers, T.A.**, 2022 Cenozoic proxy constraints on Earth system sensitivity to greenhouse gases, *Paleoceanography and Paleoclimatology*, 37, <https://doi.org/10.1029/2021PA004364>

^Koptev, A., Nettesheim, M., Falkowski, S., **Ehlers, T.A.**, 2022, 3D geodynamic-geomorphologic modeling of deformation and exhumation at curved plate boundaries: Implications for the southern Alaskan plate corner, *Scientific Reports*, 12, <https://doi.org/10.1038/s41598-022-17644-8>

^Madella, A., Glotzbach, C., **Ehlers, T.A.**, 2022, How many grains are needed for quantifying catchment erosion from tracer thermochronology?, *Geochronology*, 4, 177-190, <https://doi.org/10.5194/gchron-4-177-2022>

*Michel, L., **Ehlers, T.A.**, Bendick, R., 2022, Transitions in subduction zone slip behavior produce long-term topographic growth, Cascadia, USA, *Earth Planetary Science Letters*, 580, <https://doi.org/10.1016/j.epsl.2021.117363>

^Koptev, A., *Nettesheim, M., **Ehlers, T.A.**, 2022, Plate corner subduction and rapid localized exhumation: Insights from 3D coupled Geodynamic and geomorphological modelling, *Terra Nova*, <https://doi.org/10.1111/ter.12581>

^Botsyun, S., ^Mutz, S.G., **Ehlers, T.A.**, Koptev, A., Wang, X., Schmidt, B., Appel, E., Scherer, D., 2022, Influence of large-scale atmospheric dynamics on Late Cenozoic precipitation seasonality of the Tibetan Plateau and Central Asia in cold and warm climates during the Cenozoic, *Journal of Geophysical Research - Atmospheres*, 127, <http://doi.org/10.1029/2021JD035810>

*Oetting, A., Smith, E.C., Arndt, J.E., Dorschel, B., Drews, R., **Ehlers, T.A.**, Gaedicke, C., Hofse, C., Kuhn, G., Lambrecht, A., Läfer, A., Mayer, C., Tiedemann, R., Wilhelms, F., Klages, J., Eisen, O., 2022 (In Press), Geomorphology and shallow sub-sea floor structures underneath the Ekström Ice Shelf, Antarctica, *The Cryosphere*, 127, e2021JD035810 <https://doi.org/10.5194/tc-2021-305>

2021

^Madella, A., and **Ehlers, T.A.**, 2021, Background seismicity contributes to forearc surface uplift, *Nature Geoscience*, 14, pp. 620-625, <https://doi.org/10.1038/s41561-021-00779-0>

^Falkowski, **Ehlers, T.A.**, Madella, A., Glotzbach, C., Georgieva, V., and Strecker, M.R., 2021, Glacial catchment erosion from detrital zircon (U-Th)/He thermochronology: Patagonian Andes, *Journal of Geophysical Research - Earth Surface*, 126, e2021JF006141, <https://doi.org/10.1029/2021JF006141>

^Andrić-Tomašević, N., ^Falkowski, S., Georgieva, V., ^Glotzbach, C., Strecker, M.R., **Ehlers, T.A.**, 2020, Quantifying tectonic and glacial controls on topography in the Patagonian Andes, (46.5o S) from integrated thermochronometry and thermo-kinematic modeling, *Journal of Geophysical Research - Earth Surface*, 126, e2020JF00599 <https://doi.org/10.1029/2020JF005993>

Willett, S.D., Herman, F., Fox, M., Stalder, N., **Ehlers, T.A.**, Jiao, R., Yang, R., 2021, Bias and error in modelling thermochronometric data: resolving a potential increase in Plio-Pleistocene erosion rates, *Earth Surface Dynamics*, <https://doi.org/10.5194/esurf-2020-59>

- ^Drews, R., Wild, C., Marsh, O., Rack, W., **Ehlers, T.A.**, Neckel, N., Helm, V., 2021, Grounding-zone flow variability of Priestley Glacier, Antarctica, in a diurnal tidal regime, *Geophysical Research Letters*, <http://dx.doi.org/10.1029/2021GL093853>
- Spohn, M., Aburto, F., **Ehlers, T.A.**, Farwig, N., Frings, P.J., Hartmann, H., Hoffmann, T., Larsen, A., Oelmann, Y., 2021, Review: Ecosystems buffer inputs through storage and recycling of elements, *Biogeochemistry*, <https://doi.org/10.1007/s10533-021-00848-x>
- *Krsnik, E., Methner, K., Campani, M., Botsyun, S., Mutz, S.G., **Ehlers, T.A.**, Kempf, O., Fiegig, J., Schlunegger, F., Mulch, A., 2021 (In Press) Miocene high elevation in the Central Alps, *Solid Earth*, <https://doi.org/10.5194/se-2021-59>
- *Sharma, H., **Ehlers, T.A.**, Glotzbach, C., Schmid, M., Tielbörger, K., 2021, Effect of rock uplift and Milankovitch timescale variations in precipitation in vegetation cover on catchment erosion rates, *Earth Surface Dynamics*, <https://doi.org/10.5194/esurf-9-1045-2021>
- ^Jia, Y., Glotzbach, C., **Ehlers, T.A.**, Lu, L., 2020, Cenozoic tectonic evolution of the Pamir-Tian Shan convergence zone: evidence from detrital zircon U-Pb provenance analysis, *Tectonics*, 40, e2020TC006345, <http://doi.org/10.1029/2020TC006345>
- ^Übernickel, K., Pizarro-Araya, J., *Bhagavathula, S., Paulino, L., **Ehlers, T.A.**, 2021, Review of the composition and characteristics of burrowing animals along a climate and ecological gradient, Chile, *Biogeosciences*, 18, 5573–5594, <https://doi.org/10.5194/bg-18-5573-2021>
- Wang, X., Schmidt, B., Otto, M., **Ehlers, T.A.**, Mutz, S.G., Botsyun, S., Scherer, D., 2021, Sensitivity of water balance in the Qaidam Basin to the mid-Pliocene Climate, *Journal of Geophysical Research - Atmosphere*, 126, e2020JD033965, <https://doi.org/10.1029/2020JD033965>
- ^Mohadjer, S., ^Mutz, S.G., Kemp, M., Gill, S., Ischuk, A., **Ehlers, T.A.**, 2021, Using paired teaching for earthquake education in schools, *Geoscience Communication*, <https://doi.org/10.5194/gc-4-281-2021>
- ^Koptev, A., Cloetingh, S., Kovács, I., Gerya, T., **Ehlers, T.A.**, 2021, Continental magmatism evolution controlled by the rheological structure of the lithosphere: Evidence from the Pannonian Basin, *Earth and Planetary Science Letters*, <https://doi.org/10.1016/j.epsl.2021.116925>
- ^Eizenhöfer, P.R., Glotzbach, C., Büttner, L., Kley, J., **Ehlers, T.A.**, 2021, Turning the orogenic switch: slab-reversal in the eastern Alps recorded by low-temperature thermochronology, *Geophysical Research Letters*, 48, e2020GL092121, <https://doi.org/10.1029/2020GL092121>
- ^Botsyun, S., **Ehlers, T.A.**, 2021 (Invited) How can climate models be used in paleoelevation reconstructions? *Frontiers in Earth Sciences*, <https://doi.org/10.3389/feart.2021.624542>
- ^Mutz, S.G., ^Scherrer, S., ^Muceniece, I., **Ehlers, T.A.**, 2021 (In Press), 21st century regional temperature response in Chile based on dynamical empirical-statistical downscaling, *Climate Dynamics*, 56, pp. 2881-2994, <https://doi.org/10.1007/s00382-020-05620-9>
- ^Koptev, A., Cloetingh, S., **Ehlers, T.A.**, 2021, Longevity of small-scale (“baby”) plumes and their role in lithospheric break-up, *Geophysical Journal International*, 227, pp. 439-471, <https://doi.org/10.1093/gji/ggab223>
- Cloetingh, S., ^Koptev, A., Kovacs, I., Gerya, T., Beniest, A., Willingshofer, E., **Ehlers, T.A.**, ^Andric-Tomasevic, N., ^Botsyun, S., ^Eizenhöfer, P.R., Francois, T., Beekman, F., 2021 (In Press), Plume-induced intra-continental foundering of lithospheric mantle: An overlooked mechanism of subduction Initiation? *Geochemistry, Geophysics, Geosystems*, 22, <https://doi.org/10.1029/2020GC009482>
- Konidaris, G.E., Kostopoulos, D.S., Maron, M., Schaller, M., **Ehlers, T.A.**, Aidona, E., Tourloukis, V., Muttoni, G., Koufos, G.D., Harvati, K., 2021 Dating of the Lower Pleistocene vertebrate site of Tsiotra Vryssi (Mygdonia Basin, Greece): biochronology, magnetostratigraphy and cosmogenic radionuclides, *Quaternary*, <https://doi.org/10.3390/quat4010001>

2020

- *Starke, J., **Ehlers, T.A.**, Schaller, M., 2020, Latitudinal effect of vegetation on erosion rates identified along western South America, *Science*, 367, 1358-1361, doi.org/10.1126/science.aaz0840
- *Mohadjer, S., **Ehlers, T.A.**, Nettesheim, M., Ott, M.B., Glotzbach C., Drews, R., 2020, Temporal variations in rockfall and rockwall retreat rates in a deglaciated valley over the last 11 ka, *Geology*, doi.org/10.1130/G47092.1
- ^Botsyun, S., **Ehlers, T.A.**, Mutz, S.G., Methner, K., Krsnik, E., Mulch, A., 2020, Opportunities and challenges for paleoaltimetry in “Small” orogens: Insights from the the European Alps, *Geophysical Research Letters*, 47, doi.org/10.1029/2019GL086046

- *Ghoshal S., McQuarrie, N., Robinson, D., Adhikari, D.P., Morgan L., and **Ehlers, T.A.**, 2020, Constraining central Himalayan (Nepal) fault geometry through integrated thermochronology and thermokinematic modeling, *Tectonics*. doi.org/10.1029/2020TC006399
- ^Lang, K.A., Glotzbach, C., Ring, U., Kamp, P.J.J., **Ehlers, T.A.**, 2020, Linking orogeny and orography in the Southern Alps of New Zealand: new observations from detrital-fission-track thermochronology of the Waiho-1 borehole, *Earth and Planetary Science Letters*, doi.org/10.1016/j.epsl.2020.116586
- ^Smith, E.C., Hattermann, T., Kuhn, G., Gaedike, C., Berger, S., Drews, R., **Ehlers, T.A.**, Franke, D., Gromig, R., Hofstede, C., Lambrecht, A., Läufer, A., Mayer, C., Tiedemann, R., Eisen, O., 2019, Detailed seismic bathymetry beneath Ekström Ice Shelf, Antarctica: Implications for glacial history and ice-ocean interactions, *Geophysical Research Letters*, doi.org/10.1029/2019GL086187
- ^Schaller, M., Dal Bo, I., **Ehlers, T.A.**, Klotzsche, A., Drews, R., Fuentes Espoz, J.P., van der Kruk, J., 2020, Comparison of regolith physical and chemical characteristics from geophysical data along a climate and ecological gradient, Chilean Coastal Cordillera (26 to 38° S). *Soil*. doi.org/10.5194/soil-2020-33
- ^Jones, T.J., and **Ehlers, T.A.**, 2020, Using bench top experiments to teach dimensional analysis and analogue modelling to graduate geoscience students, *Journal of Geoscience Education*, doi.org/10.1080/10899995.2020.1855040
- ^Drews, R., ^Schannwell, C., **Ehlers, T.A.**, Gladstone, R., Pattyn, F., Matsuoka, K., 2020, Atmospheric and oceanographic signatures in the ice-shelf channel morphology of Roi Baudouin Ice Shelf, East Antarctica, inferred from radar data, *Journal of Geophysical Research - Earth Surface*. doi.org/10.1029/2020JF005587
- Cloetingh, S., **Ehlers, T.A.**, and the TOPO-EUROPE Working Group, 2020, TOPO-EUROPE-ILP's Program on Coupled Deep Earth and Surface Processes in Continental Europe and its Margins. *Jour. Geological Society of India*, 95, 441-446, doi.org/10.1007/s12594-020-1460-x
- ^Schannwell, C., ^Drews, R., **Ehlers, T.A.**, Eisen, O., Mayer, C., Malinen, M., Smith, E.C., and Eisermann, H., 2020, Quantifying the effect of ocean bed properties on ice sheet geometry over 40,000 years with a full-Stokes model, *The Cryosphere*, doi.org/10.5194/tc-2020-98
- 2019**
- Whipp, D., and **Ehlers, T.A.**, 2019, Quantifying landslide frequency and sediment residence time in the Nepal Himalaya, *Science Advances*, 5, doi.org/10.1126/sciadv.aav3482
- ^Eizenhöfer, P.R., McQuarrie, N., Shelef, E., **Ehlers, T.A.**, 2019, Fluvial responses to horizontal displacement in convergent orogens over geologic time scales. *Journal of Geophysical Research - Earth Surface*. doi.org/10.1029/2019JF005100
- ^Mutz, S.G., and **Ehlers, T.A.**, 2019, Detection and explanation of spatiotemporal patterns in Late Cenozoic paleoclimate change relevant to Earth surface processes, *Earth Surface Dynamics*, 7, 663-679, doi.org/10.5194/esurf-7-663-2019
- *Michel, L., Glotzbach, C., Falkowski, S., Adams, B. A., **Ehlers, T. A.** 2019. How steady are steady-state mountain belts? A reexamination of the Olympic Mountains (Washington State, USA). *Earth Surface Dynamics*, 7, 275-299, doi.org/10.5194/esurf-7-275-2019
- ^Glotzbach, C., Lang, K.A., Avdievitch, N., and **Ehlers, T.A.**, 2019 Increasing the accuracy of (U-Th(-Sm))/He dating with 3D grain modeling, *Chemical Geology*. 506, 113-125, doi.org/10.1016/j.chemgeo.2018.12.032
- ^Koptev A., Beniest A., Gerya T., **Ehlers T. A.**, Jolivet L., Leroy S. 2019, Plume-induced break-up of a subducting plate: Microcontinent formation without cessation of the subduction process. *Geophysical Research Letters*. 46, 3663-3675, doi.org/10.1029/2018GL081295
- ^Schannwell, C., Drews, R., **Ehlers, T.A.**, Eisen, O., Mayer, C., and Gillet-Chaulet, F., 2019, Kinematic response of ice-rise divides to changes in oceanic and atmospheric forcing, *The Cryosphere*, 13, 2673-2691. doi.org/10.5194/tc-13-2673-2019
- McQuarrie, N., ^Eizenhöfer, P.R., Long, S.P., Tobgay, T., **Ehlers, T.A.**, Blythe, A., Morgan, L., Glimore, M., Dering, G., 2019, The influence of foreland structures on hinterland cooling: evaluation and drivers of exhumation in the eastern Bhutan Himalaya, *Tectonics*. doi.org/10.1029/2018TC005340
- ^Koptev A., **Ehlers T. A.**, Nettesheim M., Whipp D. 2019 (In Press) Response of a rheologically stratified lithosphere to subduction of an indenter-shaped plate: Insights into localized exhumation at orogen syntaxes. *Tectonics*, 38, 1908-1930, doi.org/10.1029/2018TC005455

- *Dal Bo, I., Klotzsche, A., Schaller, M., **Ehlers, T. A.**, Kaufmann, M.S., Fuentes-Espoz, J. P., Vereecken, H., & Van der Kruk, J., 2019. Geophysical imaging of regolith in landscapes along a climate and vegetation gradient in the Chilean Coastal Cordillera. *Catena*, 180, 146-159, doi.org/10.1016/j.catena.2019.04.023
- Paeth, H., *Steger, C., Pollinger, F., ^Li, J., ^Mutz, S.G., **Ehlers, T.A.**, 2019, Comparison of Cenozoic surface uplift and glacial-interglacial cycles in the Himalaya-Tibet region: Insights from a regional climate model and proxy data, *Global and Planetary Change*, 177, 10-25, doi.org/10.1016/j.gloplacha.2019.03.005
- *Georgieva, V., Gallagher, K., Sobczyk, A., Sobel, E., Schildgen, T.F., **Ehlers, T.A.**, Strecker, M.R., 2019, Effect of slab-window, alkaline volcanism, and glaciation on thermochronometer cooling history, Patagonian Andes, *Earth. Planetary Science Letters*, 511, 164-176, doi.org/10.1016/j.epsl.2019.01.030

2018

- *Michel, L., **Ehlers, T.A.**, Glotzbach, C., Adams, B.A., Stübner, K., 2018, Tectonic and glacial contributions to focused exhumation in the Olympic Mountains, Washington, USA). *Geology*, 46(6), 491–494, <https://doi.org/10.1130/G39881.1>
- ^Werner, C., Schmid, M., **Ehlers, T. A.**, Fuentes-Espoz J. P., Steinkamp, J., Forrest, M., Liakka, J., Hickler, T., 2018, Effect of changing vegetation on denudation (part 1): Predicted vegetation composition and cover over the last 21 thousand years, *Earth Surface Dynamics*, 6, 829-858, <https://doi.org/10.5194/esurf-6-829-2018>.
- *Schmid M., **Ehlers, T. A.**, Werner C., Hickler, T., Fuentes-Espoz, J. P., 2018, Effect of changing vegetation on denudation (part 2): Landscape response to transient climate and vegetation cover, *Earth Surface Dynamics*, 6, 859-881, <https://doi.org/10.5194/esurf-6-859-2018>.
- *Nettesheim M., **Ehlers T.A.**, Whipp D., Koptev A. 2018. The influence of upper-plate advance and erosion on overriding plate deformation in orogen syntaxes. *Solid Earth*, 9, 1207-1224, doi.org/10.5194/se-9-1207-2018
- ^Adams, B.A., and **Ehlers, T.A.**, 2018, Tectonic controls of Holocene erosion in a glaciated orogen, *Earth Surface Dynamics*, 6, pp. 595–610, <https://doi.org/10.5194/esurf-6-595-2018>
- *R. A. Oeser, N. Stroncik, *L.-M. Moskwa, *N. Bernhard, M. Schaller, *R. Canessa, *L. van den Brink, *M. Köster, *E. Brucker, *S. Stock, J.P. Fuentes, R. Godoy, F.J. Matus, R. Oses Pedraza, P. Oses McIntyre, L. Paulino, O. Seguel, M.Y. Bader, J. Boy, M.A. Dippold, **T.A. Ehlers**, P. Kühn, Y. Kuzyakov, P. Leinweber, T. Scholten, S. Spielvogel, M. Spohn, *K. Übernickel, K. Tielbörger, D. Wagner, F. von Blanckenburg, 2018 (In Press). Chemistry and microbiology of the Critical Zone along a steep climate and vegetation gradient in the Chilean Coastal Cordillera. *Catena*, 170, 183–203. <https://doi.org/10.1016/j.catena.2018.06.002>
- *Bernhard, N., *Moskwa, L.-M., Schmidt, K., *Oeser, R.A., Aburto, F., Bader, M.Y., Baumann, K., Blanckenburg, F. von, Boy, J., *van den Brink, L., *Brucker, E., Büdel, B., *Canessa, R., Dippold, M.A., **Ehlers, T.A.**, Fuentes, J.P., Godoy, R., *Jung, P., Karsten, U., *Köster, M., Kuzyakov, Y., Leinweber, P., Neidhardt, H., Matus, F., Mueller, C.W., Oelmann, Y., Oses, R., Oses, P., Paulino, L., *Samolov, E., Schaller, M., *Schmid, M., Spielvogel, S., Spohn, M., *Stock, S., Stroncik, N., Tielbörger, K., *Übernickel, K., Scholten, T., Seguel, O., Wagner, D., Kühn, P., 2018 (In Press). Pedogenic and microbial interrelations to regional climate and local topography: new insights from a climate gradient (arid to humid) along the Coastal Cordillera of Chile. *Catena*, <https://doi.org/10.1016/j.catena.2018.06.018>.
- *Avdievitch, N.N., **Ehlers, T.A.**, Glotzbach, C., 2018, Slow long-term exhumation of the West Central Andean Plate Boundary, Chile, *Tectonics*, 37, <http://dx.doi.org/10.1029/2017TC004944>
- *Grin, E., Schaller, M., **Ehlers, T.A.**, 2018, Spatial distribution of Cosmogenic ¹⁰Be derived denudation rates between the Western Tian Shan and Northern Pamir, Tajikistan, *Geomorphology*, 321, 1-15, <https://doi.org/10.1016/j.geomorph.2018.08.007>.
- *Bomberger, C., Bendick, R., Flesch, L., **Ehlers, T.A.**, 2018, Spatial scales in topography and strain rate magnitude in the western USA, *Journal of Geophysical Research - Solid Earth*, 123, 6086-6097, <https://doi.org/10.1029/2018JB016135>
- ^Lang, K.A., **Ehlers, T.A.**, Kamp, P.J.J., Ring, U., 2018, Sediment storage in the Southern Alps of New Zealand: New observations from tracer thermochronology, *Earth and Planetary Science Letters*, 493, 140-149. <https://doi.org/10.1016/j.epsl.2018.04.016>
- ^Mutz, S. G., **Ehlers, T. A.**, Werner, M., Lohmann, G., Stepanek, C., & ^Li, J., 2018, Estimates of late Cenozoic climate change relevant to Earth surface processes in tectonically active orogens. *Earth Surface Dynamics*, 6, 271–301. <https://doi.org/10/gc8sbw>
- *Gilmore, M.E., McQuarrie, N., Eizenhöfer, P., **Ehlers, T.A.**, 2018, Testing the effects of topography, geometry and kinematics on modelled thermochronometer cooling ages in the eastern Bhutan Himalaya, *Solid Earth (EGU)*, 9, 599-627, <https://doi.org/10.5194/se-9-599-2018>.

- *Ansberque, C., Godard, V., Olivetti, V., Bellier, O., de Sigoyer, J., Bernet, M., Stübner, K., Tan, X., Xu, X., **Ehlers, T.A.**, 2018, Differential exhumation across the Longriba Fault System, eastern Tibet, *Tectonics*, 37, 663-679. <https://doi.org/10.1002/2017TC004816>
- ^Schaller, M., **Ehlers, T.A.**, Lang, K.A.H., Schmid, M., Fuentes-Espoz, J.P., 2018, Addressing the contribution of climate and vegetation cover on hill slope denudation, Chilean Coastal Cordillera, (26°-38°S), *Earth and Planetary Science Letters*, 489, 111-122. <https://doi.org/10.1016/j.epsl.2018.02.026>
- Flowers, R.M., and **Ehlers, T.A.**, 2018, Rock erodibility and the interpretation of low-temperature thermochronologic data, *Earth and Planetary Science Letters*, 482, 312-323, <https://doi.org/10.1016/j.epsl.2017.11.018>.

2017

- Garzzone, C.N. McQuarrie, N., Perez, N.D., **Ehlers, T.A.**, Beck, S.L., Kar, *N., Eichelberger, N., Chapman, A.D., Ward, K.M., Ducea, M., Lease, R.O., Poulsen, C.J., Wagner, L.S., Saylor, J.E., Zandt, G., Horton, B.K., 2017, The Tectonic Evolution of the Central Andean Plateau and Geodynamic Implications for the Growth of Plateaus, *Annual Reviews of Earth and Planetary Sciences*, 45, 529-559, <https://doi.org/doi:10.1146/annurev-earth-063016-020612>.
- *Madanipour, S., Yassaghi, A., **Ehlers, T.A.**, Enkelmann, E., 2017, Tectonostratigraphy, structural geometry and kinematics of the NW Iranian Plateau margin: Insights from the Talesh Mountains, Iran, *American Journal of Science*, 318, 208-245. <https://doi.org/doi:10.2475/02.2018.02>
- *Rak, A., McQuarrie, N., **Ehlers, T.A.**, 2017, Kinematics, exhumation, and sedimentation of the north-central Andes (Bolivia): An integrated thermochronometer and thermokinematic modeling approach, *Tectonics*, 36, 2524-2554, <https://doi.org/10.1002/2016TC004440>
- *Mohadjer, S., **Ehlers, T.A.**, Bendick R., Mutz, S.G., 2017, Differences and similarities in GPS and Quaternary fault slip rates in the Himalaya-Tibet Orogen, *Earth Science Reviews*, 174, 39-52, <https://doi.org/10.1016/j.earscirev.2017.09.005>
- *Madanipour, S., **Ehlers, T.A.**, Yassaghi, Enkelmann, E., 2017, Accelerated middle Miocene exhumation of the Talesh Mountains constrained by U-Th/He thermochronometry: evidence for the Arabia-Eurasia collision in the NW Iranian Plateau, *Tectonics*, 36, <https://doi.org/10.1002/2016TC004291>.
- ^Yanites, B.J., Becker, J., Madritsch, H., Schnellmann, M., **Ehlers, T.A.**, 2017, Lithologic effects on landscape response to base level changes: a modelling study in the context of the eastern Jura Mountains, Switzerland, *Journal of Geophysical Research - Earth Surface*, 122, <https://doi.org/10.1002/2016JF004101>
- *Starke, J., **Ehlers, T.A.**, Schaller, M., 2017. Tectonic and Climatic Controls on the Spatial Distribution of Denudation Rates in Northern Chile (18°S to 23°S) Determined From Cosmogenic Nuclides: 10 Be Denudation Rates in Northern Chile. *Journal of Geophysical Research - Earth Surface*. <https://doi.org/10.1002/2016JF004153>
- Dietze, M., Mohadjer, S., Turowski, J.M., **Ehlers, T.A.**, Hovius, N., 2017, Validity, precision and limitations of seismic rockfall monitoring. *Earth Surf. Dynam.*, 5, 653-668. <https://doi.org/10.5194/esurf-5-653-2017>
- *Zhao, Z., Bons, P.D., Stübner, K., Wang, G., **Ehlers, T.A.**, 2017, Early Cretaceous exhumation of the Qiangtang Terrane during collision with the Lhasa Terrane, Central Tibet, *Terra Nova*, 2017;001-10, <https://doi.org/10.1111/ter.12298>.
- ^Stübner, K., Grin, E., Hidy, A.J., Schaller, M., Gold, R.D., Ratschbacher, L., **Ehlers, T.**, 2017, Middle and Late Pleistocene glaciations in the southwestern Pamir and their effects on topography, *Earth and Planetary Science Letters*, 466, 181-194, <https://doi.org/doi:10.1016/j.epsl.2017.03.012>
- Schlunegger, F., Norton, K.P., Delunel, R., **Ehlers, T.A.**, Madella, A., 2017, Late Miocene increase in precipitation in the Western Cordillera of the Andes between 18-19oS latitudes inferred from shifts in sedimentation patterns, *Earth and Planetary Science Letters*, 462, 157-168. <https://doi.org/10.1016/j.epsl.2017.01.002>
- McQuarrie, N., and **Ehlers, T.A.**, 2017, Techniques for understanding fold-and-thrust belt kinematics and thermal evolution, in Law, R.D., Thigpen, J.R., Merschat, A.J., and Stowell, H.H., eds., Linkages and Feedbacks in Orogenic Systems: *Geological Society of America Memoir* 213, 1-30, [https://doi.org/doi:10.1130/2017.1213\(02\)](https://doi.org/doi:10.1130/2017.1213(02)).
- ^Adams, B.A., and **Ehlers, T.A.**, 2017, Deciphering topographic signals of glaciation and rock uplift in an active orogen: a case study from the Olympic Mountains, USA, *Earth Surface Processes and Landforms*, <https://doi.org/doi:10.1002/esp.4120>.
- *Schultz, M.H., Hodges, K.V., **Ehlers, T.A.**, van Soest, M., Wartho, J., 2017, Thermochronologic constraints on the slip history of the South Tibetan detachment system in the Everest region, southern

Tibet, *Earth and Planetary Science Letters*, 459, 105-117. <https://doi.org/doi:10.1016/j.epsl.2016.11.022>.

- Enkelmann, E., Piestrzeniewicz, A., Falkowski, S., Stübner, K., **Ehlers, T.A.**, 2017, Thermochronology in southeast Alaska and southwest Yukon: Implications for North American Plate Response to Terrane Accretion, *Earth and Planetary Science Letters*, 457, 348-358. <https://doi.org/doi:10.1016/j.epsl.2016.10.032>.
- [^]Li, J., **Ehlers, T.A.**, Werner, M., Mutz, S.G., Steger, C., Paeth, H., 2017, Late Quaternary climate, precipitation d18O, and Indian Monsoon variations over the Tibetan Plateau, *Earth and Planetary Science Letters*, 457, 412-422. <https://doi.org/doi:10.1016/j.epsl.2016.09.031>.

2016

- [^]Schaller, M., **Ehlers, T.A.**, Stor, T., Torrent, J., Lobato, L., Christl, M., Lockenhuber, C., 2016, Spatial and temporal variations in denudation rates derived from cosmogenic nuclides from four European fluvial terrace sequences, *Geomorphology*, 274, 180-192, doi.org/doi:10.1016/j.geomorph.2016.08.018.
- [^]Li, J., **Ehlers, T.A.**, Mutz, S., Steger, C., Paeth, H., Werner, M., Poulsen, C.J., Feng, R., 2016, Modern precipitation d18O and trajectory analysis over the Himalaya-Tibet Orogen from ECHAM5-wiso simulations, *Journal of Geophysical Research-Atmospheres*, 121, 10,432-10452, <https://doi.org/10.1002/2016JD024818>
- [^]Li, J., **Ehlers, T.A.**, Werner, M., Mutz, S., Steger, C., and Paeth, H., 2016, Late Quaternary climate, precipitation d18O, and Indian Monsoon variations over the Tibetan Plateau, *Earth and Planetary Science Letters*, 457, 412-422, <https://doi.org/10.1016/j.epsl.2016.09.031>
- [^]Mutz, S.G., **Ehlers, T.A.**, Li, J., Steger, C., Paeth, H., Werner, M., Poulsen, C.J., 2016, Precipitation d18O over the Himalaya-Tibet Orogen from ECHAM5-wiso Simulations: Statistical Analysis of Temperature, Topography, and Precipitation. *Journal of Geophysical Research-Atmospheres*, 121, 9278-9300, <https://doi.org/10.1002/2016JD024856>.
- [^]Schaller, M., **Ehlers, T.A.**, Stor, T., Torrent, J., Lobato, L., Christl, M., Lockenhuber, C., 2016, Timing of fluvial terrace formation in Europe constrained by cosmogenic nuclide dating, *Earth and Planetary Science Letters*, 451, 221-231, <https://doi.org/10.1016/j.epsl.2016.07.022>
- [^]Lease, R.O., **Ehlers, T.A.**, Enkelmann, E., 2016 Large along strike variations in the onset of Subandean deformation: Implications for Central Andes orogenic growth, *Earth and Planetary Science Letters*, 451, 62-76, <https://doi.org/10.1016/j.epsl.2016.07.004>
- [^]Yanites, B.J., and **Ehlers, T.A.**, 2016, Intermittent glacial sliding velocities explain variations in long-timescale denudation, SW British Columbia. *Earth and Planetary Science Letters*, 450, pp. 52-61, <https://doi.org/10.1016/j.epsl.2016.06.022>
- *Grin, E., **Ehlers, T.A.**, Schaller, M., Glaoguen, R., Ratschbacher, L., 2016, 10Be surface exposure age dating of the last glacial maximum in the northern Pamir Orogen (Tajikistan), *Quaternary Geochronology*, 34, 47-57, <https://doi.org/10.1016/j.quageo.2016.03.007>
- *Perez, N.D., Horton, B.K., McQuarrie, N., Stübner, K., **Ehlers, T.A.**, 2016, Andean shortening, inversion and exhumation associated with thin- and thick-skinned deformation in southern Peru, *Geol. Mag.*, 1-29, <https://doi.org/10.1017/S0016756816000121>
- *Georgieva, V., Melnick, D., Schildgen, T.F., **Ehlers, T.A.**, Lagabriele, Y., Enkelmann, E., Strecker, M.R., 2016, Tectonic control on rock uplift, exhumation, and topography above an oceanic-ridge collision - Southern Patagonian Andes (47° S), Chile, *Tectonics*. 35, 1317-1341, <https://doi.org/10.1002/2016TC004120>
- *Mohadjer, S., **Ehlers, T.A.**, Bendick, R., Stübner, K., Strube, T., 2016, A Quaternary fault database for Central Asia., *Natural Hazards and Earth System Sciences*, 16, 529-542, <https://doi.org/10.5194/nhess-16-529-2016>
- *Falkowski, S., E. Enkelmann, K. Drost, J. A. Pfänder, K. Stübner, and **Ehlers, T.A.**, 2016, Cooling history of the St. Elias syntaxis, southeast Alaska, revealed by geo- and thermochronology of cobble-sized glacial detritus. *Tectonics*, 35, <https://doi.org/10.1002/2015TC004086>
- [^]Stübner, K., Drost, K., Schoenberg, R., Böhme M., Starke, J., and **Ehlers, T.A.**, 2016, Asynchronous timing of extension and basin formation in the South Rhodope core complex, SW Bulgaria and northern Greece, *Tectonics*, <https://doi.org/10.1002/2015TC004044>

2015

- *Fiorella, R., Poulsen, C.J., Pilco-Zolá, S., Jeffery, M.L., **Ehlers, T.A.**, 2015, Modern and long-term evaporation of central Andes surface waters suggests paleo archives underestimate Neogene elevations, *Earth Planetary Science Letters*, v. 432, 59-72. <https://doi.org/10.1016/j.epsl.2015.09.045>

- *Strunden, J., **Ehlers, T.A.**, Brehm, D., Nettesheim, M., 2015, Spatial and temporal variations in rockfall determined from TLS measurements in a deglaciated valley, Switzerland, *Journal of Geophysical Research - Earth Surface*, v. 120, 1251-1273. <https://doi.org/10.1002/2014JF003274>
- ^Adams, B.A., Hodges, K.V., Whipple, K.X., **Ehlers, T.A.**, van Soest M.C., Wartho, J., 2015, Constraints on the tectonic and landscape evolution of the Bhutan Himalaya from thermochronometry, *Tectonics*, v. 34, 1329-1347. <https://doi.org/10.1002/2015TC003853>.
- ^Enkelmann, E., and **Ehlers, T.A.**, 2015, Evaluation of detrital thermochronology for quantification of glacial catchment denudation and sediment mixing, *Chemical Geology*, v. 411, 299-309. <https://doi.org/10.1016/j.chemgeo.2015.07.018>
- McQuarrie, N., and **Ehlers, T.A.**, 2015, Influence of thrust belt geometry and shortening rate on thermochronometer cooling ages: Insights from the Bhutan Himalaya, *Tectonics*, v. 34, 1055-1079. <https://doi.org/10.1002/2014TC003783>
- Ehlers, T.A.**, Szameitat, A., Enkelmann, E., Yanites, B.J., Woodsworth, G.J., 2015, Identifying spatial variations in glacial catchment erosion with detrital thermochronology, *Journal of Geophysical Research -Earth Surface*, v. 120, 1023-1039. <https://doi.org/10.1002/2014JF003432>
- ^Enkelmann, E., **Ehlers, T.A.**, Merli, G., Methner, K., 2015, Thermal and exhumation history of the Eocene Chumstick Basin, Washington State, USA, *Tectonics*. V.34, 951-969. <https://doi.org/10.1002/2014TC003767>
- *Fiorella, R.P., Poulsen, C.J., Pillco-Zolá, S., Barnes, J.B., Tabor, C.R., **Ehlers, T.A.**, 2015, Spatiotemporal variability of modern precipitation d18O in the central Andes and Implications for paleoclimate and paleoaltimetry estimates, *Journal of Geophysical Research -Atmospheres*, v. 120, 4630-4656. <https://doi.org/10.1002/2014JD022893>
- ^Headley, R.M., and **Ehlers, T.A.**, 2015, Ice flow models and glacial erosion over multiple glacial-interglacial cycles, *Earth Surface Dynamics*, v. 3, 153-170. <https://doi.org/10.5194/esurf-3-153-2015>

2014

- Bendick, R., and **Ehlers, T.A.**, 2014, Extreme localized exhumation at syntaxes initiated by subduction geometry, *Geophysical Research Letters*, v. 41, 5861-5867. <https://doi.org/10.1002/2014GL061026>
- *Deng, B., Liu, S., Enkelmann, E., Li, Z., **Ehlers, T.A.**, Jansa, L., 2014, Late Miocene accelerated exhumation of the Daliang Mountains, southeastern margin of the Tibetan Plateau, *International Journal of Earth Sciences (Geol Rundsch)*, v.104, 1061-1081. <https://doi.org/10.1007/s00531-014-1129-z>
- *Jeffery, M.L., Yanites, B.J., Poulsen, C.J., **Ehlers, T.A.**, 2014, Vegetation-Precipitation controls on Central Andean topography, *Journal of Geophysical Research - Earth Surface*, v. 119, 1354-1375. <https://doi.org/10.1002/2013JF002919>
- *Falkowski, S., Enkelmann, E., **Ehlers, T.A.**, 2014, Constraining the area of rapid and deep-seated exhumation at the Yakutat plate corner, southeast Alaska, *Tectonics*, v. 33, 597-616. <https://doi.org/10.1002/2013TC003408>

2013

- Herman, F., Seward, D., Valla, P.G., Carter, A., Kohn, B., Willett, S.D., **Ehlers, T.A.**, 2013, Worldwide acceleration of mountain erosion under a cooling climate, *Nature*, v. 504, 423-426. <https://doi.org/10.1038/nature12877>
- ^Lease, R.O., and **Ehlers, T.A.**, 2013, Incision into the eastern Andean Plateau during Pliocene cooling, *Science*, v. 341, 774-776. <https://doi.org/10.1126/science.1239132>
- *Grabowski, D.M., Enkelmann, E., **Ehlers, T.A.**, 2013, Spatial extent of rapid denudation in the glaciated St. Elias syntax's region, SE Alaska, *Journal of Geophysical Research - Earth's Surface*, v. 118, 1921-1938. <https://doi.org/10.1002/jgrf.20136>
- *Madanipour, S., **Ehlers, T.A.**, Yassaghi, A., Rezaeian, M., Enkelmann, E., Bohroudi, A., 2013, Synchronous deformation on orogenic plateau margins: Insights from the Arabia-Eurasia collision, *Tectonophysics*, v. 608, 440-451. <https://doi.org/10.1016/j.tecto.2013.09.003>
- *Eichelberger, N., McQuarrie, N., **Ehlers, T.A.**, Enkelmann, E., Lease, R.O., Barnes, J.B., 2013, New constraints on the chronology, magnitude, and distribution of deformation within the central Andean orocline, *Tectonics*, v. 32, 1432-1453. <https://doi.org/10.1002/tect.20073>
- *Insel, N., Poulsen, C.J., Sturm, C., **Ehlers, T.A.**, 2013, Climate controls on Andean precipitation d18O interannual variability, *Journal of Geophysical Research - Atmosphere*, v. 118, 9721-9742. <https://doi.org/10.1002/jgrd.50619>

- Thiede, R.C., and **Ehlers, T.A.**, 2013, Large spatial and temporal variations in Himalayan denudation, *Earth and Planetary Science Letters*, v. 371-372, 278-293. <https://doi.org/10.1016/j.epsl.2013.03.004>
- *Lee, J.P., Stockli, D.F., Kelley, S.A., Pederson, J.L., Karlstrom, K.E., **Ehlers, T.A.**, 2013, New thermochronometer constraints on the Tertiary landscape evolution of the Central and Eastern Grand Canyon, Arizona, *Geosphere*, v. 9, 216-228. <https://doi.org/10.1130/GES00842.1>
- ^Yanites, B.J., **Ehlers, T.A.**, Becker, J.E., Schnellman, M.H., Heuberger, S., 2013, High magnitude and rapid incision from river capture: Rhine River, Switzerland, *Journal of Geophysical Research – Earth Surface*, v. 118, 1060-1084. <https://doi.org/10.1002/jgrf.20056>
- *Jeffery, L.M., **Ehlers, T.A.**, Yanites, B.J., Poulsen, C. J., 2013, Quantifying the role of paleoclimate and Andean Plateau uplift on river incision, *Journal of Geophysical Research – Earth Surface*, v.118, 852-871. <https://doi.org/10.1002/jgrf.20055>
- *Rushlow, C.R., Barnes, J.B., **Ehlers, T.A.**, Verges, J., 2013, Exhumation of the southern Pyrenean foldthrust belt from orogenic growth to decay, *Tectonics*, v. 32, 843-860. <https://doi.org/10.1002/tect.20030>
- Bao, G., **Ehlers, T.A.**, Li, P., 2013, Radiogenic source identification for the helium production-diffusion equation, *Communications Computational Physics*, v. 14, 1-20. <https://doi.org/10.4208/cicp.030112.250512a>
- 2012**
- Barnes, J.B., **Ehlers, T.A.**, Insel, N., McQuarrie, N., Poulsen, C.J., 2012, Linking orography, climate, and exhumation across the central Andes, *Geology*, v. 40, 1135-1138. <https://doi.org/10.1130/G33229.1>
- ^Enkelmann, E., **Ehlers, T.A.**, Buck, G., Schatz, A.K., 2012, Advantages and challenges of automated apatite fission track counting, *Chemical Geology*, v. 322-323, 278-289. <https://doi.org/10.1016/j.chemgeo.2012.07.013>
- ^Yanites, B.J., and **Ehlers, T.A.**, 2012, Global climate and tectonic controls on the denudation of glaciated mountains, *Earth and Planetary Science Letters*, v. 325-326, 63-75. <https://doi.org/10.1016/j.epsl.2012.01.030>
- *Olen, S., **Ehlers, T.A.**, Densmore, M.S., 2012, Limits to reconstructing paleotopography from thermochronometer data, *Journal of Geophysical Research – Earth Surface*, v. 117. <https://doi.org/10.1029/2011JF001985>
- *Jeffery, L.M., Poulsen, C.J., **Ehlers, T.A.**, 2012, Impacts of Cenozoic global cooling, surface uplift and an inland seaway on South American Paleoclimate and Precipitation $\delta^{18}O$, *Geological Society of America Bulletin*. <https://doi.org/10.1130/B30480.1>
- *Insel, N., Poulsen, C.J., **Ehlers, T.A.**, Sturm, C., 2012, Response of meteoric $\delta^{18}O$ to surface uplift – implication for Cenozoic Andean Plateau growth, *Earth Planetary Science Letters*, v. 317-318, 262-272. <https://doi.org/10.1016/j.epsl.2011.11.039>
- 2011**
- Enkelmann, E., **Ehlers, T.A.**, Zeitler, P.K., Hallet, B., 2011, Denudation of the Namche Barwa Antiform, Eastern Himalaya, *Earth Planetary Science Letters*, v. 307, 323-333. <https://doi.org/10.1016/j.epsl.2011.05.004>
- Bao, G., Y. Dou, **Ehlers, T.A.**, Li, P., Wang, Y., Xu, Z., 2011, Quantifying tectonic and geomorphic interpretations of thermochronometer data with inverse problem theory, *Communications Computational Physics*, v. 9, 129-146. <https://doi.org/10.4208/cicp.090110.270410a>
- 2010**
- Poulsen, C.J., **Ehlers, T.A.**, Insel, N., 2010, Onset of convective rainfall during gradual Late Miocene rise of the Central Andes, *Science*, v. 328, 490-493. <https://doi.org/10.1126/science.1185078>
- ^Schaller, M., **Ehlers, T.A.**, Blum, J.D., 2010, Soil transport on a moraine foreslope, *Geomorphology*, v. 115, 117-128. <https://doi.org/10.1016/j.geomorph.2009.09.040>
- *Insel, N., **Ehlers, T.A.**, Schaller, M., Barnes, J.B., Tawacoli, S., Poulsen, C.J., 2010, Spatial and Temporal Variability in Denudation across the Bolivian Andes from Multiple Geochronometers, *Geomorphology*, v. 122, 65-77. <https://doi.org/10.1016/j.geomorph.2010.05.014>
- 2009**
- *Whipp, D.M. Jr., **Ehlers, T.A.**, Braun, J., Spath, C.D., 2009, Effects of exhumation kinematics and topographic evolution on detrital thermochronometer data, *Journal of Geophysical Research – Earth Surface*, v. 114. <https://doi.org/10.1029/2008JF001195>
- *Schildgen, T., **Ehlers, T.A.**, Whipp, D.M. Jr., van Soest, M., Whipple, K., Hodges, K., 2009, Quantifying canyon incision and Andean Plateau surface uplift, southwest Peru: A thermochronometer

and numerical modeling approach, *Journal of Geophysical Research – Earth Surface*, v. 114. <https://doi.org/10.1029/2009JF001305>

- *Barnes, J.B., and Ehlers, T.A., 2009, End member models for Andean Plateau uplift, *Earth Science Reviews*, v. 97, 105-132. <https://doi.org/10.1016/j.earscirev.2009.08.003>
- *Insel, N., Poulsen, C.J., Ehlers, T.A., 2009, Influence of the Andes Mountains on South American moisture transport, convection, and precipitation, *Climate Dynamics*, v.35, pp. 1477-1492. <https://doi.org/10.1007/s00382-009-0637-1> (Highlighted in Nature Geoscience News and Views Article, 2009, v. 2, 607).
- Ehlers, T.A.**, and Poulsen, C.J., 2009, Influence of Andean uplift on climate and paleoaltimetry estimates, *Earth and Planetary Science Letters*, v. 281, pp. 238-248. (Selected as a Science magazine Editor's Choice article, 2009, v. 324, p. 857). <https://doi.org/10.1016/j.epsl.2009.02.026>
- ^Stock, G.M., Frankel K.L., Ehlers, T.A., Schaller, M., Briggs, S.M., Finkel R.C., 2009, Spatial and temporal variations in denudation of the Wasatch Mountains, Utah, USA, *Lithosphere GSA*, v. 1, 34-40. <https://doi.org/10.1130/L15.1>
- Thiede, R.C., Ehlers, T.A., Bookhagen, B., Strecker, M.R., 2009, Erosional variability along the northwest Himalaya, *Journal of Geophysical Research – Earth Surface*, v. 114. <https://doi.org/10.1029/2008JF001010>
- ^Schaller, M., Ehlers, T.A., Blum, J.D., Kallenberg, M.A., 2009, Quantifying glacial moraine age, erosion, and soil mixing with cosmogenic depth profiles, *Journal of Geophysical Research – Earth Surface*, v. 114. <https://doi.org/10.1029/2007JF000921>
- ^Schaller, M., Blum, J.D., Ehlers, T.A., 2009, Combining cosmogenic nuclides and major elements from moraine soil profiles to improve weathering rate estimates, *Geomorphology*, v. 106, 198-205. <https://doi.org/10.1016/j.geomorph.2008.10.014>

2008

- McQuarrie, N., Ehlers, T.A., Barnes, J.B., Meade, B., 2008, Temporal variations in climate and tectonic coupling in the Central Andes, *Geology*, v. 36, 999-1002. <https://doi.org/10.1130/G25124A.1>
- McQuarrie, N., Barnes, J.B., Ehlers, T.A., 2008, Geometric, kinematic, and erosional history of the central Andean Plateau, Bolivia (15-17°S), *Tectonics*, v. 27. <https://doi.org/10.1029/2006TC002054>
- *Barnes, J.B., Ehlers, T.A., McQuarrie, N., O'Sullivan, P., Tawackoli, S., 2008, Thermochronometer record of central Andean Plateau growth, Bolivia (19.5°S), *Tectonics*, v. 27. <https://doi.org/10.1029/2007TC002174>

2007

- *Whipp, D.M., and Ehlers, T.A., 2007, Influence of groundwater flow on thermochronometer derived exhumation rates in the Nepalese Himalaya, *Geology*, v. 35, 851-854. <https://doi.org/10.1130/G23788A.1>
- *Densmore, M.S., Ehlers, T.A., Woodsworth, G.J., 2007, Effect of alpine glaciation on thermochronometer age-elevation profiles, *Geophysical Research Letters*, v.34. <https://doi.org/10.1029/2006GL028371>
- *Huntington, K.W., Ehlers, T.A., Hodges, K.V., Whipp, D.M. Jr., 2007, Topography, exhumation pathway, age uncertainties, and the interpretation of erosion rates from thermochronometer data, *Tectonics*, v. 26. <https://doi.org/10.1029/2007TC002108>
- *Reich, M., Ewing R.C., Ehlers, T.A., Becker, U., 2007, Low-temperature anisotropic diffusion of helium in zircon: Implications for zircon (U-Th)/He thermochronometry, *Geochimica Cosmochimica acta*, v. 71, 3119-3130. <https://doi.org/10.1016/j.gca.2007.03.033>
- ^Rahl, J.M., Ehlers, T.A., van der Pluijm B.A., 2007, Quantifying transient erosion of orogens with detrital thermochronology from syntectonic basin deposits, *Earth and Planetary Science Letters*, v. 256, 147-161. <https://doi.org/10.1016/j.epsl.2007.01.020>
- *Whipp, D.M., Ehlers, T.A., Blythe, A., Ruhl, K., Hodges, K., Burbank, D., 2007, Plio-Quaternary erosion and kinematic history of the Central Himalaya: thermo-kinematic model of thermochronometer exhumation, *Tectonics*, v. 26. <https://doi.org/10.1029/2006TC001991>

2006

- Ehlers, T.A.**, Farley, K.A., Rusmore, M.E., Woodsworth, G.J., Apatite (U-Th)/He signal of large magnitude and accelerated glacial erosion: southwest British Columbia, *Geology*, v. 34, 765-768. <https://doi.org/10.1130/G22507.1>
- ^Stock, G.M., Ehlers, T.A., Farley, K.A., 2006, Where does sediment come from? Quantifying catchment erosion with detrital apatite (U-Th)/He thermochronometry, *Geology*, v. 34, 725-728. <https://doi.org/10.1130/G22592.1>
- *Barnes, J.B., Ehlers, T.A., McQuarrie, N., O'Sullivan, P.B., Pelletier, J.D., 2006, Eocene to recent variations in erosion across the central Andean fold-thrust-belt, northern Bolivia: Implications for

plateau evolution, *Earth and Planetary Science Letters*, v. 248, 118-133. <https://doi.org/10.1016/j.epsl.2006.05.018>

^Schaller, M., and Ehlers, T.A., 2006, Limits to quantifying climate driven changes in denudation rates with cosmogenic radionuclides, *Earth and Planetary Science Letters*, v. 248, 153-167. <https://doi.org/10.1016/j.epsl.2006.05.027>

2005

Shuster, D., Ehlers, T.A., Rusmore, M.R., Farley, K.A., 2005, Rapid glacial erosion at 1.8 Ma revealed by $4\text{He}/3\text{He}$ thermochronometry, *Science*, v. 310, 1668-1670. <https://doi.org/10.1126/science.1118519>

Ehlers, T.A., 2005, Crustal thermal processes and thermochronometer interpretation. *Reviews in Mineralogy and Geochemistry*, v. 58, 315-350. <https://doi.org/10.2138/rmg.2005.58.12>

Ehlers, T.A., *Chaudhri, T., *Kumar, S., Fuller, C.W., Willett, S.D., Ketcham, R., Brandon, M.T., Belton, D., Kohn, B., Gleadow, A.J., Dunai, T., Fu, F., 2005, Computational tools for low-temperature thermochronometer interpretation, *Reviews in Mineralogy and Geochemistry*, v. 58, 589-622. <https://doi.org/10.2138/rmg.2005.58.22>

Reiners, P.W., Ehlers, T.A., Zeitler, P., 2005, Past, present, and future of thermochronology, *Reviews in Mineralogy and Geochemistry*, v. 58, 1-18. <https://doi.org/10.2138/rmg.2005.58.1>

Heimsath, A.H., and Ehlers, T.A., 2005, Editorial: Quantifying rates and timescales of geomorphic processes, *Earth Surface Processes and Soils*, v. 30, 917-922. <https://doi.org/10.1002/esp.1253>

Reiners, P.W., and Ehlers, T.A., 2005, Preface to Low-Temperature Thermochronology, techniques, interpretations, and applications, *Reviews in Mineralogy and Geochemistry*, v. 58, pp.V-iX. <https://doi.org/10.2138/rmg.2005.58.0>

2004

Armstrong, P.A., Taylor, A.R., Ehlers, T.A., 2004, Is the Wasatch fault footwall (Utah, USA) segmented over million year time scales? *Geology*, v. 32, 385-388. <https://doi.org/10.1130/G20421.1>

2003

Reiners, P.W., Ehlers, T.A., Gran-Mitchell, S., Montgomery, D.R., 2003, Coupled spatial variations in precipitation and long-term erosion rates across the Washington Cascades, *Nature*, v. 426, 645-647. <https://doi.org/10.1038/nature02111>

Armstrong, P.A., Ehlers, T.A., Chapman, D.S., Farley, K.A., Kamp, P.J.J., 2003, Exhumation of the Central Wasatch Mountains, Utah: 1. Constraints from low-temperature thermochronometers, *Journal of Geophysical Research*, v. 108. <https://doi.org/10.1029/2001JB001708>

Ehlers, T.A., Willett, S.D., Armstrong, P.A., Chapman, D.S., 2003, Exhumation of the Central Wasatch Mountains, Utah: 2. Thermo-kinematics of exhumation, erosion and thermochronometer interpretation, *Journal of Geophysical Research*, v. 108. <https://doi.org/10.1029/2001JB001723>

Ehlers, T.A., and Farley, K.A., 2003 (Invited), Apatite (U-Th)/He Thermochronometry: methods and applications to problems in tectonics and surface processes, *EPSL-Frontiers*, v. 206, pp. 1-14. (Article listed on the 'Top 25 Hottest' (top cited) articles for EPSL since 2010.) [https://doi.org/10.1016/S0012-821X\(02\)01069-5](https://doi.org/10.1016/S0012-821X(02)01069-5)

Reiners, P.W., Zhou, Z., Ehlers, T.A., Changhai, X., Brandon, M.T., Donelick, R.A., Nicolescu, S., 2003, Post-orogenic evolution of the Dabie Shan, eastern China, from (U-Th)/He and fission-track thermochronology, *American Journal of Science*, v. 303, 489-518.

2002

Reiners, P.W., Ehlers, T.A., Garver, J.I., Gran-Mitchell, S., Montgomery, D., Vance, J.A., Nicolescu, S., 2002, Late Miocene exhumation and uplift of the Washington Cascades, *Geology*, v. 30, 767-770. <https://doi.org/10.2475/ajs.303.6.489>

2001

Wannamaker, P.E., Bartley, J.M., Sheehan, A.F., Jones, C.M., Lowry, A.R., Dumitru, Ehlers, T.A., Holbrook, W.S., Farmer, G.L., Unsworth, M.J., Chapman, D.S., Okaya, D.A., John, B.E., and Wolfe, J.A., 2001, Great Basin-Colorado Plateau transition in Central Utah: An interface between active extension and stable interior, in Proceedings of the J. Hoover Mackin Symposium on The Geological Transition: Colorado Plateau to Basin and Range, *American Association of Petroleum Geologists*, v. 30, GB78, 38 p. (no doi available)

Ehlers, T.A., Armstrong, P.A., and Chapman, D.S., 2001, Normal fault thermal regimes and the interpretation of low-temperature thermochronometers, *Physics of the Earth and Planetary Interiors*, v. 126, 179-194. [https://doi.org/10.1016/S0031-9201\(01\)00254-0](https://doi.org/10.1016/S0031-9201(01)00254-0)

1999

Ehlers, T.A., and Chapman, D.S., 1999, Normal fault thermal regimes: conductive and hydrothermal heat transfer surrounding the Wasatch Normal Fault, Utah, *Tectonophysics*, v. 312, 217-234. [https://doi.org/10.1016/S0040-1951\(99\)00203-6](https://doi.org/10.1016/S0040-1951(99)00203-6)

Ehlers, T.A., and Chan, M.A., 1999, Tidal sedimentology and estuarine deposition of the Proterozoic Big Cottonwood Formation, Utah, *Journal of Sedimentary Research*, v. 69, 1169-1180. <https://doi.org/10.2110/jsr.69.1169>

1997- AND OLDER

Ehlers, T. A., Chan, M. A., and Link, P. K., 1997, Proterozoic tidal, glacial, and fluvial sedimentation in Big Cottonwood Canyon, Utah; *Brigham Young University Geology Studies*, v. 23, 1997 GSA field trip guide.

Clark, J., and **Ehlers, T.A.**, 1993, Glacial isostasy of the Door Peninsula, Wisconsin; in Pleistocene geomorphology and stratigraphy of the Door Peninsula, A. Schneider (ed.), *Midwest Friends of the Pleistocene*, v. 40, 31-36.