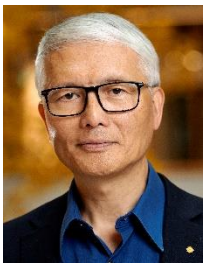
# Deliang Chen

(Updated on 18 April 2024)
Tel.: +46 766 184813 | E-mail: deliang@gvc.gu.se
Work Address: Box 460 Department of Earth Sciences
University of Gothenburg
Medicinaregatan 7B, 405 30 Gothenburg, Sweden



## Personal information

| | | | |
|---|---|---|---|
| **Sex** | Male | **Date of Birth** | July 21, 1961 |
| **Place of Birth** | Jiangsu, China | **Citizenship** | Swedish |
| **ResearcherID** | A-5107-2013 | **Scopus Author ID** | 8284622100 |
| **Personal homepage** | http://rcg.gvc.gu.se/dc | **Research group's homepage** | http://rcg.gvc.gu.se/ |
| **ORCID** | http://orcid.org/0000-0003-0288-5618 | | |

## Education

**1989-1992: PH.D.,** Johannes Gutenberg University of Mainz, Germany

Major: Geosciences; Minors: Theoretical Meteorology (Dynamics) and Applied Mathematics (numerical methods for differential equations). Supervisors of the three subjects are Prof. P. J. Crutzen (Nobel Laureate) and Prof. M. Domrös, Prof. W. Zdunkowski, and Prof. W. Börsch-Supan respectively.

Title of the Ph.D. thesis: 'Development of a Two-Dimensional Model of Global Climate-Transport'. Degree earned on 27 February 1992.

**1989-1992: B.SC.,** Department of Meteorology, Nanjing University, Nanjing, China

Majored in Climatology

## Main work experience

2012-2018 **Assistant Dean** for Research of the Faculty of Science, University of Gothenburg

2009-2012 **Executive Director** of the International Council for Science (ICSU)

2007- The **August Röhss Chair** in Physical Geography at University of Gothenburg

2006-2007 **Director** for 'Gothenburg Atmospheric Science Centre'

1993 Senior Lecturer (**Lektor**) in Physical Meteorology at Department of Earth Sciences, University of Gothenburg, Sweden in July 1993. Promoted to Associate Professor (**Docent**) in 1996. Became **Full Professor** of Physical Meteorology in 2000. His research interests include Earh System science, Global Change and regional climate change with a focus on water cycle, environmental change over the Third Pole. In 1995 Deliang Chen funded the Regional Climate Group (RCG: http://rcg.gvc.gu.se) who is specialized in past and future regional climate changes using instrumental and proxy data, as well as advanced statistical techniques and numerical climate models. Recent studies additionally include the impact of climate change on water resources, air quality, and agriculture.

1992-1993 **Post-doctoral Research Assistant** focusing on developing simple atmosphere model for studying air-sea interactions, at the Department of Physics II, Alfred-Wegener-Institute for Polar and Marine Research, Bremerhaven, Germany

1992 **Post-doctoral Research Assistant** focusing on using regional air quality model to study dry deposition, at the Institute of Geophysics and Meteorology, University of Cologne, Cologne, Germany

1988-1992 **Ph.D. student** working on developing two dimensional climate model for air chemistry studies under the guidance of Prof. Paul J. Crutzen at Max-Planck-Institute for Chemistry, Mainz, Germany

1983-1988 **Researcher** and **Personal Assistant** to the Director and Research Assistant at Institute of Geography, CAS, Beijing, China. Research works concerns climate productivity of crops and water balances for the northern China during 1984 and 1985, crop water requirements and evapotranspiration during 1985 and 1986, and land surface process modeling in global climate model during 1987 and 1988.

## Membership in professional Society

2018 - Life member of the American Geophysical Union (AGU)

2019 - Life member of the European Geophysical Union (EGU)

## Awards and distinctions

2024 Awarded the title of an Honorary Professor of Beijing Normal University

2023 Elected ISC (International Science Council) Fellow. The Fellowship is the highest honor awarded by ISC to those championing science in and for society.

2023 Clarivate™ Highly Cited Researchers™

2022 Research.com Environmental Sciences in Sweden Leader Award

2021 Awarded the Synergy Prize by the Science Faculty of the University of Gothenburg

2021 Listed by Göteborgs-Posten as No. 2 of the 100 most influential persons in west Sweden

2021 Awarded the H. M. The King's Medal in the 8th size with the Order of the Seraphim ribbon for outstanding contributions to Swedish and international climate research

2021 Listed in the @Reuters Hot List of 1,000 top climate scientists in the world

2019 Awarded the title of an Honorary Professor of Nanjing University

2018 Elected member of the European Academy of Sciences and Arts

2018 Winner of the 2017 International Science and Technology Cooperation Award of the People's Republic of China

2018 Elected Foreign Member of the Norwegian Academy of Science and Letters

2017 Winner of the 2016 Award for International Scientific Cooperation of CAS

2017 Elected Foreign Member of CAS

2015 Elected Fellow of the World Academy of Sciences (TWAS)

2014 Awarded *Pro Arte et Scientia* Medal by the University of Gothenburg

2013 Elected Member of the Royal Society of Arts and Sciences in Gothenburg

2012 Awarded the title of an Honorary Professor of Institute of Tibetan Plateau Research, CAS

2010 Elected Member of the Royal Swedish Academy of Sciences

## Selected commissions of trust

2023-2024 Member of the Board of Selection Committee of the ICBS (International Congress of Basic Science) Frontiers of Science Award (FSA) for Climate & Environment Modeling

| | |
|---|---|
| 2024 | Member of the Global Committee of the ICBS's FSA Award |
| 2023-2024 | Member of the Membership Advisory Committees of TWAS. |
| 2023-2027 | Member of the Advisory Board of “National Science Review (NSR)”. |
| 2021- | Elected member of the Future Earth Governing Council. |
| 2021- | Chairman of the Scientific Steering Committee of Beijing Institute of Urban Meteorology |
| 2021, 2023 | Member of the Editorial Board of the “10 New Insights in Climate Science 2021” led by Future Earth, The Earth League and WCRP. |
| 2020-2024 | Board member of The Future Earth Sweden Foundation. |
| 2019- | Chair of the Alumni Strategic Advisory Committee, School of Atmospheric Science, Nanjing University, China. |
| 2018-2023 | Mentor for Wallenberg Academy Fellows’ mentorship programme supported by the Wallenberg Foundation and the Royal Swedish Academy of Sciences. |
| 2018-2021 | Coordinating Lead Author of the sixth Assessment Report (AR6) of IPCC (International Panel of Climate Change) Working Group I. |
| 2018- | International expert for CAS’ pilot project “Big data for Earth Science". |
| 2018- | Chair of the Class for Geosciences of the Royal Swedish Academy of Sciences. |
| 2017-2021 | Member of the Editorial Board of "Big Earth Data". |
| 2017- | Member of the International Jury for the TWAS-Lenovo Science Prize in Geological Sciences. |
| 2017-2019 | Member of External Science Advisory Group (ESAG) of the Bolin Centre for Climate Research at Stockholm University. |
| 2016- | Chair of the Nomination Committee of the Stockholm Water Prize. |
| 2016- | Member of Science Steering Committee of the Future Earth Core Project Integrated Risk Governance (IRG). |
| 2016- | Member of the Advisory Board for Penn State’s Advanced Data Assimilation and Predictability Techniques (ADAPT) Center. |
| 2015-2017 | Member of the Baltic Earth Senior Advisory Board |
| 2015-2017 | Chief Editor of the Oxford Research Encyclopedia “Regional climate and climate change in the region of Tibet” |
| 2014-2016 | Associate Editor-in-Chief of “Journal of Geographical Sciences”. |
| 2014- | Associate Editor-in-Chief of “Advances in Climate Change Research”. |
| 2014-2017 | Member of the Advisory Committee for the International Research Prize in Science, Mathematics and Medicine and Support for the Nordic Research Projects for the Olav Thon Foundation. |
| 2014- | Member of the International Science Advisory Council of Stockholm Resilience Centre |
| 2013-2022 | Member of the Editorial Board of “National Science Review (NSR)”. |
| 2013-2019 | Member of the Science Committee for the VOLVO Environment Prize. |
| 2013-2015 | Member of the Project Evaluation Committee, Research Institute for Humanity and Nature (RIHN), Japan. |
| 2012-2017 | Member of the Swedish National Committee for Global Environmental Change, Royal Swedish Academy of Sciences. |
| 2012, 2008 | Jury member for the Sixten Heyman Prize. |
| 2011- | Co-chair of the Executive Board of the Third Pole Environment (TPE). |
| 2011-2016 | Chair of the Scientific Advisory Committee for ECDS (Environment Climate Data Sweden: http://www.smhi.se/ecds). |

| | |
|---|---|
| 2011-2013 | Member of the French ANR (the French National Research Agency) Scientific Steering Committee on Earth System Science. |
| 2011-2013 | Member of the Advisory Group for the OECD Programme on Innovation, Higher Education and Research for Development. |
| 2011-2017 | Member of the Editorial Board for 'Environmental Development'. |
| 2010 | Member of the Science Committee for the '3rd Nobel Laureate Symposium on Global Sustainability' organized by the Royal Swedish Academy of Sciences. |
| 2010-2013 | Lead Author of Chapter 1 'Introduction' in the IPCC (International Panel of Climate Change) Working Group I (AR5). |
| 2009-2012 | Member of the Steering Committee for the World Science Forum. |
| 2008-2015 | Member of the Environment Committee of the Royal Swedish Academy of Sciences. |
| 2008- | Member of the Editorial Board for 'Chinese Geographical Science'. |
| 2008- | Member of the Editorial Committee for 'Journal of Earth Environment'. |
| 2007 | Guest Editor for 'Atmospheric Chemistry and Physics'. |
| 2006-2007 | Member of the Swedish National Committee for Geophysics (SNG) under Royal Swedish Academy of Sciences. |
| 2006 | Guest Editor for 'Geografiska Annaler'. |
| 2004-2005 | Member of the National Swedish Committee for IGCP (International Geoscience Programme of the United Nations). |
| 2004-2008 | Member of the Royal Swedish Academy of Sciences' Committee for IGBP/WCRP (International Geosphere-Biosphere Programme/World Climate Research Programme). |
| 2004-2015 | Editor for 'Acta Meteorologica Sinica' (both English and Chinese). |
| 2002- | Member of the Editorial Board of 'Advances in Geographical Science' (in Chinese). |
| 2000-2003 | Member in the Atmospheric Sciences Committee of the National Swedish Space Agency. |
| 2000 | Reviewer for Norwegian Natural Science Research Council. |
| 2000-2001 | Visiting Professor at the University of Cologne, Germany. |
| 1999-2003 | International expert for the German Ministry of Education and Research (BMBF). |
| 1999 | Contributing Author of Chapter 10 'Regional Climate Simulation -- Evaluation and Projections' in the IPCC Working Group I (AR3). |
| 1998-2002 | Member of the Reviewing Committee member in Geosciences at Swedish Natural Science Research Council. |

## Research interests

- Earth System Science and global environmental change
- Climate dynamics and modeling
- Atmospheric circulation and water balance in the Third Pole Region
- Recent and future regional climate changes and their impacts on water, ecosystem, environment, and agriculture with a focus on Sweden and China.

## Teaching experience

| | |
|---|---|
| Undergraduate courses | Climate system, Micro-climatology, Applied climatology, Climate variability and change, Integrated assessment of climate change and its impact, Synoptic |

| | |
|---|---|
| | climatology; Earth System Science, Climate modeling, Fundamental Meteorology, Atmospheric Science, Introduction to GIS, Climate change in an Earth System perspective, Climate and society, Global change - problem, analysis, measures, Climate change from a geographical perspective, Climate and society. |
| Postgraduate courses | Computerized Environmental Modeling, Modeling in Physical Geography, Climate dynamics, Meteorology today for scientists and engineers, Environmental Statistics, Boundary Layer Meteorology, Climate modeling, Geostatistics, GIS. |
| Summer school | "Climate model simulations", July 2017 in Lanzhou, June 2018 in Beijing, China;<br>"The Eleventh International Seminar on Climate System and Climate Change", 14-25 July 2014, Beijing, China;<br>"the downscaling summer course" at Lodz University in Poland, 18-22 June 2007;<br>"First ECCE Summer School for Advanced Study in Climate and Earth Environment: Modeling of the Climate System", July 30 - August 12, 2006, Beijing, China. |

## Supervision of graduated Ph.D. students

| | | |
|---|---|---|
| Gerrit Lohmann | 1995 | Stability of the thermohaline circulation in analytical and numerical models |
| Lars Lindkvist | 1997 | Investigations of local climate variability in a mountainous area--including case studies on air, soil and soil surface properties in complex terrain |
| Katarina Borne | 1998 | Observational study of sea and land breeze on the Swedish west coast with focus on an archipelago |
| Barbro Johansson | 2002 | Estimation of areal precipitation for hydrological modelling in Sweden |
| Maj-Lena Linderson | 2002 | The Spatial Distribution of Precipitation in Scania, Southern Sweden: Observations, model simulations and statistical downscaling |
| Cecilia Hellström | 2003 | Regional climate and climate variability of Sweden |
| Christine Achberger | 2004 | Recent and Future regional climate change variations in Sweden in relation to large-scale climate |
| Fredrik Wetterhall (Co-supervisor) | 2005 | Statistical downscaling and hydrological modelling for climate impact assessment in northern Europe |
| Lijun Fan | 2006 | Statistical downscaling in China |
| Junfeng Miao | 2006 | Meteorological modelling in coastal areas - local climate and air quality |
| Yanling Song | 2007 | Impact of climate change on agriculture in China |
| Elisabeth Simelton | 2007 | Climate and human impacts on wheat production and land use in the loess plateau region, China |
| Shuiqing Yin | 2008 | Characterization and Simulation of Sub-daily Scale Precipitation for China |
| Lin Tang | 2009 | Regional and Local Surface Ozone Variations in Relation to Meteorological Conditions in Sweden |
| Cecilia Bennet | 2009 | The Tropospheric Aerosol - Measurements and Modelling. Case studies in Tanzania and Southeast Asia and development of models for size resolved aerosol simulations on the regional scale |
| Matilda Palm | 2009 | Land Use in Climate Policy - Forest Based Options at Local Level with Cases from India |
| Christin Eriksson (Co-supervisor) | 2009 | Characterizing and reconstructing 500 years of climate in the Baltic Sea Basin |
| Ge Gao | 2010 | Changes of evapotranspiration and water cycle in China during past decades |
| Jenny Sundberg (Co-supervisor) | 2011 | Impact of ozone on ecosystems under climate change |

| | | |
|---|---|---|
| Ida Westerberg (Co-supervisor) | 2011 | Observational Uncertainties in water-resources modelling in Central America |
| Sihong Wu (Co-supervisor) | 2011 | Impact of cold climate on boreal ecosystem processes-exploring data and model uncertainties |
| Lars Zetterberg | 2011 | Instruments for reaching climate objectives -focusing on the time aspects of bioenergy and allocation rules in the European Union's emissions trading system |
| Yaoming Liao | 2012 | Study and application of stochastic weather generator BCC/RCG-WG |
| Alexander Walther | 2012 | Simulated and observed change of precipitation and temperature in Europe with focus on the Greater Baltic Area |
| Tinghai Ou | 2013 | Observed and simulated changes in extreme precipitation and cold surges in China: 1961-2005. |
| Peng Zhang | 2015 | Summer Climate Variability during the Past 1200 Years in Central Scandinavia: A Tree-Ring Perspective. |
| Xiaowen Zhang | 2018 | Contribution of changes in atmospheric circulation patterns to regional temperature and precipitation variation. |
| Aifang Chen | 2020 | Tropical cyclone induced extreme wind, rainfall, and floods in the Mekong River Basin. |
| Gangfeng Zhang (Co-supervisor) | 2020 | Change of wind speed over North China: process, mechanism and assessment of environment effects. |
| Lorenzo Minola | 2020 | Changes in near-surface winds across Sweden over the past decades - Observations and simulations. |
| Bo Su | 2022 | Changes in the Provisioning Function and Services of Glacier Water Recourses across the Globe with a focus on China |
| Julia Kukulies | 2023 | Observing and Modeling Precipitation in the Tibetan Plateau region -From large-scale processes to convective storms. |
| Hui-Wen Lai | 2023 | Towards an improved understanding of precipitation variations over the Tibetan Plateau. |

## Postdocs and visitors

| | |
|---|---|
| Postdoc | Xiaoye Yang, Zhengyao Lu, Ruzhen Yao, Lorenzo Minola, Chunlue Zhou, Julia Curio, Kaiqiang Deng, Guojin Pang, Cesar Azorin-Molina, Xuejia Wang, Xiaorui Niu, Marston Johnston, Jianbin Huang, Changgui Lin, David Rayner, Wenbin Liu, Mousong Wu, Klaus Wyser, Jee-Hoon Jeong, Youmin Chen, Katarina Borne, Madelene Ostwald, Shuiqing Yin, Christine Achberger, Lijun Fan, Hans Linderholm |
| Visiting PhD | Shalenys Bedoya-Valestt, Haolin Luo, Jiayue Zhou, Lulei Bu, Xuan Liu, Junbin Wang, Bo Su, Gangfeng Zhang, Huiru Jiang, Myung-Il Jung, Lianyi Guo, Hongyu Xie, Yudan Wang, Yan Wang, Kaijun Wu, Ning Jiang, Xiuzhen Li, Weiwen Wang, Masoud Irannezhad, Yilai Peng, Cesar Azorin-Molina |
| Visiting researcher | Associate Professor Qin Wen from Nanjing Normal University,<br>Prof. Chuixiang Yi from the City University of New York,<br>Dr. Tat Fan (Fandy) Cheng from the Hong Kong University of Science and Technology,<br>Prof. Wenhong Li from Duke University,<br>Prof. Chris Folland from the Met Office UK,<br>Prof. Fuqing Zhang from Penn State University,<br>Prof. Xiuzhen Li from Sun Yat-Sen University,<br>Prof. Kun Yang from Tsinghua University, |

Dr. Yufeng Dai from Institute of Tibetan Plateau Research, Chinese Academy of Sciences (CAS),
Prof. Seok-Woo Son from Seoul National University in Korea,
Prof. Fei Wang from Institute of Soil and Water Conservation, CAS,
Prof. Xuemei Wang from Jinan University,
Dr. Aristita Busuoic from National Meteorological Administration of Romania,
Prof. Dr. Manuel Nunez from University of Tasmania,
Prof. Xiaodong Li from Beijing University,
Prof. Bin He and Yun Xie from Beijing Normal University,
Prof. Yu Liu from Institute of Earth Environment of CAS,
Prof. Tijian Wang from Nanjing University,
Dr. Jiandong Liu from Chinese Academy of Meteorological Sciences,
Prof. Xuejie Gao from Institute of Atmospheric Physics of CAS,
Prof. Ying Xu, Dr. Yanling Song, and Dr. Huanping Wu from the National Climate Center of China Meteorological Administration,
Dr. Yudong Tian from University of Maryland/NASA,
Prof. Yanhong Gao from Cold and Arid Regions Environmental and Engineering Research Institute of CAS,
Dr. Rasmus Benestad from the Norwegian Meteorological Institute,
Dr. Keyan Fang from Fujian Normal University of China,
Prof. Chang-Hoi Ho from Seoul National University in Korea,
Prof. Weihong Qian from Peking University.

## Faculty opponent for Ph.D. defenses at other universities

| | |
|---|---|
| 2022 | Velia Bigi at Politecnico di Torino: "Understanding vulnerability to natural and quasi-natural hazards: the importance of a local scale perspective for the production of relevant information" |
| 2022 | Lianyu Yu at Universiteit Twente: "Coupled Water–Heat–Carbon Exchange Processes in Cold Environments: Observation and Numerical Modeling" |
| 2021 | Yiheng Du at Lund University: "Present and Future Precipitation Variations in the Source Region of the Yangtze River, China" |
| 2019 | Astrid Fremme at University of Bergen: "Moisture sources for East Asian monsoon precipitation" |
| 2016 | Patrick W. Keys at Stockholm University: "The Precipitationshed – Methods, Concepts, and Applications" |
| 2015 | Feifei Yuan at Lund University: "Impacts of climate change on surface hydrology in the source region of the Yellow River" |
| 2015 | Giulio N. Caroletti at University of Bergen: "A Linear Model for Orographic Precipitation in meteorological and climatological downscaling" |
| 2008 | Carin Nilsson at Lund University: "Windstorms in Sweden - variations and impacts" |
| 2006 | Christer Jansson at KTH Royal Institute of Technology: “Surface energy balance and small-scale climate within the urban environment” |
| 2004 | Tony Persson at Uppsala University: “Evaporation and Heat-flux Aggregation in Heterogeneous Boreal Landscapes”. |

## Selected research grants (Since 2016)

1. Leading project “Impact of climate variation and change on offshore wind energy potential” supported by Swedish Formas (2023-01648), 2024-2027.
2. Participating in project “Investigation of the impact of technological developments in batteries on Swedish future air transportation” supported by the Chalmers University of Technology and University of Gothenburg, 2024-2025.
3. Participating in project “Towards a sustainable and resilient water supply in Sweden: Holistic solutions to groundwater drought and water scarcity” supported by Swedish Formas (2023-00515), 2024-2027.
4. Participating in project “Co-Creating Better Blue – C2B2” supported by Swedish Mistra, 2023-2027.
5. Participating in project “PHOENIX: Human Mobility, Global Challenges and Resilience in an Age of Social Stress” supported by Belmont Forum via Swedish Research Council (VR: 2022-06011), 2022-2025.
6. Supervising EU project ”EXTREME: Robust attribution of human-induced thermodynamic and dynamic contributions in historical changes of regional heat and cold waves over Europe” under the MARIE SKŁODOWSKA-CURIE ACTIONS Individual Fellowships (IF) program, supported by the European Commission (101067046), 2022-2024.
7. Participating in the project “New Interdisciplinary Framework for Studying the Relation between Climate Change and Migration” supported by the Swedish Research Council (VR: 2021-02163), 2022-2027.
8. Participating in BECC (Swedish National Research Program on Biodiversity and Ecosystem services in a Changing Climate) project “The impact of warming-induced summer vegetation drought on the vegetation greening, tree growth and carbon fluxes in Sweden”, 2022-2023.
9. Participating in MERGE (Swedish National Research Program on ModElling the Regional and Global Earth system) and BECC project “Learning from a fire prone past for a fire prone future: Assessing the effect of forest fires (pilot project)”, 2021-2022.
10. Leading STINT project "Simulation study on influences of natural forcings on decadal change of the Third Pole-East Asia monsoon precipitation” (CH2020-8767), 2021-2023.
11. Leading the SNIC Large Compute project “High resolution climate modelling with a focus on convection and associated precipitation over the Third Pole region” (SNIC 2020/1-14) supported by Swedish National Infrastructure for Computing (SNIC) partially funded by the Swedish Research Council through grant agreement no. 2016-07213, 2020-2021.
12. Participating in STINT project "Climate change and its impacts on hydrology and water resources in the Yangtze and Mekong River basins” (CH2019-8377), 2020-2022.
13. Leading project “Linking accelerated warming over the Tibetan Plateau to the increased frequency of European summer heat waves” supported by Swedish Research Council (VR: 2019-03954), 2020-2022.
14. Participating in SSSTC project “Understanding snow, glacier and rivers response to climate in High Mountain Asia (ASCENT)” supported by SNSF and NSFC, 2020-2023.
15. Leading MERGE (Swedish National Research Program on ModElling the Regional and Global Earth system) project “Developing a modeling framework for regional land-atmosphere interaction studies: an application in the Third Pole”, 2020-2021.
16. Participating in MERGE (Swedish National Research Program on ModElling the Regional and Global Earth system) project “Towards improved understanding of albedo-climate interaction of common land uses across Sweden”, 2020-2021.
17. Participating in BECC (Swedish National Research Program on Biodiversity and Ecosystem services in a Changing Climate) project “Impacts of extreme drought on ecosystems in Eurasia and Sweden - the role of deep water reserves”, 2020-2021.
18. Leading project “Impacts of extremely high summer temperature and drought on forest over Eurasia with a focus on Sweden” supported by Swedish Formas (2018-02858), 2019-2021.
19. Leading project " Dynamics and importance of convection for precipitation in the Third Pole region: Satellite and ground-based observation versus model simulations" supported by Swedish National Space

Agency (SNSA: 188/18), 2019-2021.

20. Participating in project "Safe and Sustainable groundwater-based water supply in Swedish cities and countryside" supported by Swedish Formas (2018- 00302), 2018-2019.
21. Participating in project "Variations of precipitation and transpiration on Tibetan Plateau in response to the warming since the Little Ice Age" supported by Swedish Formas (2017-1408), 2018-2020.
22. CI for project "Observed trends and future changes in the intensity, frequency, and duration of very hot weather in Hong Kong" supported by General Research Fund of Hong Kong (RGC Ref No. 11306417), 2018-2020.
23. Participating in project "Detection and attribution of changes in extreme wind gusts over land" supported by Swedish Research Council (VR: 2017-03780), 2018-2021.
24. Participating in project "A novel framework to evaluate the impact of climate change on groundwater resources in Sweden" supported by Swedish Formas (2016-513), 2017-2019.
25. Participated in project "S-CMIP: Swedish climate research and contributions to the sixth International Coupled Model Intercomparison Project (CMIP6) - phase 3 (2017)" supported by the Swedish National Supercomputer Centre (SNIC: 2016/34-21:).
26. Led project "Impact of climate change on water balance on The Third Pole Region" supported by The Swedish Foundation for International Cooperation in Research and Higher Education (STINT: CH2015-6226), 2016-2018.
27. Supervised EU project "STILLING: TowardS improved undersTandIng of the worLdwide decline of wind speed in a cLImate chaNGe scenario" under the MARIE SKŁODOWSKA-CURIE ACTIONS Individual Fellowships (IF) program, supported by the European Commission (703733), 2016-2018.
28. Participating in project "Northern Hemisphere warm-season jet stream variability and its links to climate extremes over the last millennium: JETCLIM" supported by Swedish Research Council (VR: 2015-04031), 2016-2019.

## Selected invited lecturers and keynotes since 2014

- Keynote "Complex/Compound Disaster Risk under Climate Change" at the **International Conference on Climate Change and Disaster Risk,** organized by China-Pakistan Joint Research Center on Earth Sciences, International Association for Hydro-Environment Engineering and Research, Pakistan Academy of Sciences, and Quaid-i-Azam University, 25-27 October 2023 in Islamabad.
- Keynote "Changes in wind climate: observations, causes, and future projections" at **Climate, Weather and Water Forum (CW2F),** organized by HKUST, 5-7 June 2023 in Hong Kong.
- Keynote "The importance of research across disciplines and national boundaries for global sustainability" at **PAIR Conference: Research Excellence for Societal Impacts,** organized by The PolyU Academy for Interdisciplinary Research (PAIR), 8-11 May 2023 in Hongkong.
- Keynote "Climate change impacts in the Third Pole" at **the Living Planet Symposium 2019,** organized by ESA, 13-17 May 2019 in Milan.
- Keynote "Observations, reanalysis, and modeling of the regional climate and water cycle at the Earth's Third Pole" at **American Meteorological Society's Third Symposium on Multi-scale Predictability: Data-model Integration and Uncertainty Quantification for Climate and Earth System Monitoring and Prediction**, organized by AMS, 7-11 January 2018, Austin, TX.
- Invited Lecture "Towards global sustainability: The role of research across disciplines and national boundaries" at **the Norwegian Academy of Science and letters** on 14 September 2017, Oslo.
- Keynote "Regional climate change in Tibet: past and future" at **Symposium on Advanced Assimilation and Uncertainty Quantification in Big Data Research for Weather, Climate and Earth System Monitoring and Prediction**, organized by Penn State's Center on Advanced Data Assimilation and Predictability Techniques (ADAPT), May 23-24, 2016, College State.
- Keynote "Factors influencing variability of the Indian monsoon" at **International Workshop on Indian Monsoon and Earth System**, organized by Third Pole Environment (TPE), March 28-29, 2016, Kathmandu.

- Keynote "A Climate Scientist's Reflection on Big Data" at **Workshop on Big Data for International Scientific Programmes: Challenges and Opportunities**, organized by CODATA, WDS, IRDR, Future Earth, GEO, RDA, ISDE, RADI, June 8-9, 2014, Beijing.

## Publications

**Summary**: (co-)authored 600+ refereed articles in journals including 40+ articles in high-profile ones such as *Nature Climate Change (4), Nature Communications (5), Nature Geoscience (2), Nature Energy (2), Nature Sustainability (1), Nature Water (1), Nature Reviews Earth & Environment (2), Science (3), Science Advances (2), Science Bulletin (9), National Science Review (5), and PNAS (2);* 7 refereed books or book chapters; and 200+ conference proceedings or reports. Total citations=45 173, H-index=91 (according to Google Scholar).

**Peer-reviewed articles**

1. Bu, L., Z. Zuo, **D. Chen**, K. Zhang, L. Qiao, 2024: Upstream evaporation is the key to extreme summertime heat stress in north China. ***Earth Systems and Environment***, DOI: 10.1007/s41748-024-00381-5.
2. Cai, Z., Q. You, H. W. Chen, R. Zhang, Z. Zuo, **D. Chen**, J. Cohen, J. A. Screen, 2024: Assessing arctic wetting: Performances of CMIP6 models and projections of precipitation changes. ***Atmospheric Research***, 297: 107124. DOI: 10.1016/j.atmosres.2023.107124.
3. Chen, X., L. Yuan, Y. Ma, **D. Chen**, Z. Su, D. Cao, 2024: doubled increasing trend of evapotranspiration on the Tibetan Plateau. ***Science Bulletin,*** DOI: 10.1016/j.scib.2024.03.046.
4. Chen, X., X. Xu, Y. Ma, G. Wang, **D. Chen**, D. Cao, X. Xu, Q. Zhang, L. Li, Y. Liu, L. Liu, M. Li, S. Luo, X. Wang, X. Hu, 2024: Investigation of precipitation process in the water vapor channel of the Yarlung Zsangbo Grand Canyon. ***BAMS***. DOI 10.1175/BAMS-D-23-0120.1.
5. Deng, K., S. Yang, K. Fan, Z. Wang, W. Yu, Z. Huang, M. Xia, **D. Chen**, T. Lian, and B. Tian, 2024: A dry-wet teleconnection between southwestern and northeastern China in winter and early spring. ***Climate Dynamics***. https://doi.org/10.1007/s00382-024-07228-9.
6. Deng, K., S. Yang, W. Liu, H. Li, **D. Chen**, T. Lian, G. Zhang, J. Zha, C. Shen, 2024: The offshore wind speed changes in China: an insight into CMIP6 model simulation and future projections. ***Climate Dynamics***. DOI: 10.1007/s00382-023-07066-1.
7. Gao, Y., J. Liu, Q. Wen, **D. Chen**, W. Sun, L. Ning, M. Yan, 2024: The influence of increased $CO_2$ concentrations on AMOC interdecadal variability under LGM background. ***Journal of Geophysical Research: Atmosphere*** 129, e2023JD039976. https://doi.org/10.1029/2023JD039976.
8. Irannezhad, M., A. Sadeqi, J. Liu, **D. Chen**, 2024: Building on Iran's Gorgan Bay restoration. ***Science***. Vol 383, Issue 6685, 837-837, DOI: 10.1126/science.adn9742.
9. Jiang, N., C. Zhu, Z.-Z. Hu, M. McPhaden, **D. Chen**, B. Liu, S. Ma, Y. Yan, T. Zhou, W. Qian, J.-J. Luo, X. Yang, F. Liu, Y. Zhu, 2024: Enhanced risk of record-breaking regional temperatures during the 2023-24 El Niño. ***Scientific Reports***. 14:2521, https://doi.org/10.1038/s41598-024-52846-2.
10. Lai, H.-W., **D. Chen,** and H. W. Chen, 2024: Precipitation variability related to atmospheric circulation patterns over the Tibetan Plateau. ***International Journal of Climatology*** 44, 1–17**,** DOI: 10.1002/joc.8317.
11. Li, J., Y. Zhao, **D. Chen**, P. Zhao, C. Zhang, Y. Wang, 2024: The quantitative role of moisture and vertical motion in shaping summer heavy rainfall over North China under two distinct large-scale weather patterns. ***Journal of Climate,*** https://doi.org/10.1175/JCLI-D-22-0850.1.
12. Li, N., L. Wang, **D. Chen**, and D. Wang, 2024: Vegetation greening amplifies shallow soil temperature warming on the Tibetan Plateau. ***npj Climate and Atmospheric Science***, In press.
13. Liang, L., A. D. Ziegler, **D. Chen**, P. Ciais, L. Z. X. Li, S. Liang, D. Wang, R. Xu, and Z. Zeng, 2024: Changing footprint of the Pacific Decadal Oscillation on global land surface air temperature. ***Science Bulletin 69***, 445-448**,** DOI: 10.1016/j.scib.2023.12.004.
14. Liu, R., L. Wang, Z. Wang, X. Li, **D. Chen**, J. Zhou, J. Qi, Y. Wang, C. Chai, G. Wang, H. Xiao, 2024: Cryosphere-hydrometeorology observations for a water tower unit on the Tibetan Plateau using the

BeiDou-3 navigation satellite system. ***Bulletin of the American Meteorological Society***, DOI 10.1175/BAMS-D-23-0001.1.

15. Liu, W., S. Yang, **D. Chen**, J. Zha, G. Zhang, Z. Zhang, T. Zhang, L. Xu, X. Hu, and K. Deng, 2024: Rapid acceleration of arctic near surface wind speed in a warming climate. ***Geophysical Research Letters***. In press.
16. Liu, L., Y. Yi, H. Jiang, Y. Ran, **D. Chen**, 2024: ERA5-Land overestimates runoff coefficient but underestimates runoff recession rate in the Tibetan permafrost region. ***Journal of Hydrology-Regional Studies***. In press.
17. Long, J., L. Wang, **D. Chen**, N. Li, J. Zhou, X. Li, X. Guo, H. Liu, C. Chai, and X. Fan, 2024: Hydrological projections in the Third Pole using artificial intelligence and an observation-constrained cryosphere-hydrology model. ***Earth's Future,*** 12, e2023EF004222. https://doi.org/10.1029/2023EF004222.
18. Luo, H., Z. Wang, C. He, **D. Chen**, and S. Yang: 2024: Future changes in South Asian summer monsoon circulation under global warming: Role of the Tibetan Plateau heating. ***npj Climate and Atmospheric Science***. In press.
19. Ma, M., J. Tang, T. Ou, **D. Chen**, 2024: Contribution of recycled and external advected moisture to precipitation and its inter-annual variation over the Tibetan Plateau. ***Journal of Geophysical Research: Atmospheres***. In press.
20. Pan, Y. J. Yang, Q. Yao, S. New, Q. Bao, **D. Chen**, C. Chun, 2024: How well do multi-fire danger rating indices represent China forest fire variations across multi-time scales? ***Environmental Research Letters***. DOI 10.1088/1748-9326/ad2d3d.
21. Ren, Z., Y.-F. Sang, P. Cui, **D. Chen**, Y. Zhang, T. Gong, S. Sun, N. Mellouli, 2024: Temporal scaling characteristics of sub-daily precipitation in Qinghai-Tibet Plateau. ***Earth s Future***. DOI: 10.1029/2024EF004417.
22. Shi, F., X. Li, S. Zhao, Y. Ma, J. Wei, Q. Liao, **D. Chen**, 2024: Evaporation and sublimation measurement and modeling of an alpine saline lake influenced by freeze–thaw on the Qinghai–Tibet Plateau. ***Hydrology and Earth System Sciences***, 28, 163-178, DOI: 10.5194/hess-28-163-2024.
23. Shi, F., X. Wu, X. Li, P. Ciais, H. Liu, C. Yue, Y. Yang, S. Zhang, S. Peng, Y. Yin, B. Poulter, **D. Chen**, 2024: Seasonal compensation implied no weakening of the land carbon sink in the Northern Hemisphere under the 2015/2016 El Niño. ***SCIENCE CHINA Earth Sciences*** 67(1), DOI: 10.1007/s11430-022-1224-1.
24. Song, L., L. Wang, D. Luo, **D. Chen**, J. Zhou, 2024: Assessing hydrothermal changes in the upper Yellow River Basin amidst permafrost degradation. ***npj Climate and Atmospheric Science***. https://doi.org/10.1038/s41612-024-00607-3.
25. Sun, H., T. Yao, F. Su, T. Ou, Z. He, G. Tang, **D. Chen**, 2024: Increased glacier melt enhances future extreme floods in the southern Tibetan Plateau. ***Advances in Climate Change Research***. https://doi.org/10.1016/j.accre.2024.01.003.
26. Sun, H., T. Yao, F. Su, W. Yang, **D. Chen**, 2024: Spatiotemporal responses of runoff to climate change on the southern Tibetan Plateau. ***Hydrology and Earth System Sciences (HESS),*** https://doi.org/10.5194/hess-2024-11.
27. Sun, W., **D. Chen**, G. Lü, L. Ning, C. Gao, R. Zhang, B. Wang, J. Liu, 2024: Impacts of major volcanic eruptions over the past two millennia on both global and Chinese climate: A review. ***Science China: Earth Sciences*** 67, 61–78, DOI: 10.1007/s11430-022-1218-0.
28. Sun, W., Y. Ma, J. Liu, **D. Chen**, L. Ning, M. Yan, K. Chen, 2024: Multi-centennial ENSO-like variability response to solar activity during the Holocene. ***Climate Dynamics,*** https://doi.org/10.1007/s00382-024-07198-y.
29. Wang, L., H. Liu, R. Bhlon, **D. Chen**, J. Long, and T. C. Sherpa, 2024: Modeling glacio-hydrological processes in the Himalayas: A review and future perspectives. ***Geography and Sustainability,*** DOI: 10.1016/j.geosus.2024.01.001.
30. Wang, L., H. Liu, K. Seftigen, **D. Chen**, C. Fang, B. Liang, Y. Yue, K. Wang, 2024: Historical soil moisture variability in high-latitude humid regions: insights from a paleoclimate data-model comparison. ***Earth's Future***. DOI: 10.1029/2023EF004017.

31. Wang, Y., H. Wang, P. Cui, **D. Chen**, J. Tang, T. Ou, J. Hao, J. Wang, G. Zhang, Y. Lei, C. Wu, 2024: Disaster effects of climate change and the associated scientific challenges. ***Chinese Science Bulletin***, Volume 69, Issue 2: 286 – 300. https://doi.org/10.1360/TB-2023-0325.
32. Wu, M., F. Jiang, M. Scholze, **D. Chen**, W. Ju, S. Wang, T. Kaminski, Z. Lu, M. Voβbeck, and M. Zheng, 2024: Regional responses of vegetation productivity to the two phases of ENSO. ***Geophysical Research Letters***. In press.
33. Yang, S., **D. Chen**, K. Deng, 2024: Global effects of climate change in the south China sea and its surrounding areas. ***Ocean-Land-Atmosphere Research,*** DOI: 10.34133/olar.0038.
34. Yang, X., C. Shen, G. Zhang, **D. Chen**, 2024: Enhanced spring warming of the Tibetan Plateau amplifies summer heat stress in Eastern Europe. ***Climate Dynamics***, DOI: 10.1007/s00382-024-07197-z.
35. Yang, X., G. Zeng, S. Zhang, V. Iyakaremye, C. Shen, W.-C. Wang, **D. Chen**, 2024: Phase-locked wave-4 pattern dominates the concurrent summer heat extremes in the Northern Hemisphere. ***Geophysical Research Letters,*** https://doi.org/10.1029/2023GL107106.
36. Yang, X., S. Zhang, C. Shen, **D. Chen**, 2024: Summer long-lived heatwaves in Northeast Asia promote heavy precipitation in South China. ***Atmospheric Research,*** DOI: 10.1016/j.atmosres.2024.107244.
37. Zhang, C., Q. Tang, Y. Zhao, **D. Chen**, J. Huang, Y. Liu, X. Zhang, 2024: Moisture source differences between the 2020 and 1998 super Meiyu-flood events in the Yangtze River Valley. ***Weather and Climate Extremes,*** DOI: 10.1016/j.wace.2024.100644.
38. Zhang, C., X. Zhang, Q. Tang, **D. Chen**, J. Huang, S. Wu, Y. Liu, 2024: Quantifying precipitation moisture contributed by different atmospheric circulations across the Tibetan Plateau. ***Journal of Hydrology***, 628: 130517. DOI: 10.1016/j.jhydrol.2023.130517.
39. Zhang, G., C. Azorin-Molina, **D. Chen**, T. R. McVicar, J. A. Guijarro, K. Deng, L. Minola, J. Lee, S.-W. Son, P. Shi, 2024: Multi-decadal variability and long-term trends of near-surface wind speed over the Tibetan Plateau: the role played by westerly and Asian monsoon. ***Advances in Climate Change Research,*** in press.
40. Zhang, Q., C. Yi, G. Wohlfahrt, **D. Chen**, M. Rietkerk, Z. Tian, M. Wu, E. Kutter, J. Han, G. Hendrey, S. Xu, 2024: Climate indices as predictors of global soil organic carbon stocks. ***Geografiska Annaler: Series A, Physical Geography***, DOI: 10.1080/04353676.2024.2335000.
41. Zhang, S., G. Zhang, G. Gong, T. Y. Gan, **D. Chen**, and J. Liu, 2024: Moisture sources and pathways of annual maximum precipitation in the Lancang-Mekong River Basin. ***Geophysical Research Letters***, 51, e2023GL10762, 2DOI: 10.1029/2023GL107622.
42. Zhou, F., Z. Dong, K. Fang, D. Cheng, H. Tang, T. Ou, F. Zhang, **D. Chen**, 2024: Summer heat induced the decline of Pinus taiwanensis forests at its southern limit in humid Subtropical China. ***Agricultural and Forest Meteorology*** 350, 109974, https://doi.org/10.1016/j.agrformet.2024.109974.
43. Zuo, Z., L. Qiao, R. Zhang, **D. Chen**, S. Piao, D. Xiao, K. Wang, 2024: Importance of soil moisture conservation in mitigating climate change. ***Science Bulletin***. https://doi.org/10.1016/j.scib.2024.02.033.
44. Axelsson, J., J. Gao, S. Eckhardt, M. Cassiani, **D. Chen**, Q. Zhang, 2023: A precipitation isotopic response in 2014-2015 to moisture transport changes in the central Himalayas. ***Journal of Geophysical Research: Atmospheres*** 128(13): e2023JD038568, DOI: 10.1029/2023JD038568.
45. Azorin-Molina, C., A. A. Safaei Pirooz, S. Bedoya-Valestt, E. Utrabo-Carazo, M. Andres-Martin, C. Shen, L. Minola, J. A. Guijarro, E. Aguilar, M. Brunet, R. G. J. Flay, S. M. Vicente-Serrano, T. R. McVicar, **D. Chen**, 2023: Biases in wind speed measurements due to anemometer changes. ***Atmospheric Research***, 289 106771, DOI: 10.1016/j.atmosres.2023.106771.
46. Bustamante, M., J. Roy, D. Ospina, P. Achakulwisut, A. Aggarwal, A. Bastos, W. Broadgate, J. G. Canadell, E. R. Carr, **D. Chen**, H. A.Cleugh, K. L. Ebi, C. Edwards, C. Farbotko, M. Fernández-Martínez, T. L. Frölicher, S. Fuss, O. Geden, N. Gruber, L. J. Harrington, J. Hauck, Z. Hausfather, S. Hebden, A. Hebinck, S. Huq, M. Huss, M. L. P. Jamero, S. Juhola, N. Kumarasinghe, S. Lwasa, B. Mallick, M. Martin, S. McGreevy, P. Mirazo, A. Mukherji, G. Muttitt, G.F. Nemet, D. Obura, C. Okereke, T. Oliver, B. Orlove, N. S. Ouedraogo, P. K. Patra, M. Pelling, L. M. Pereira, Å. Persson, J. Pongratz, A. Prakash, A. Rammig, C. Raymond, A. Redman, C. Reveco, J. Rockström, R. Rodrigues, D. R. Rounce, E. L. F. Schipper, P. Schlosser, O. Selomane, G. Semieniuk, Y.-J. Shin, T.m A. Siddiqui, V. Singh, G. B. Sioen, Y. Sokona, D. Stammer, N. J. Steinert, S. Suk, R. Sutton, L. Thalheimer, V.

Thompson, G. Trencher, K. van der Geest, S. E. Werners, T. Wübbelmann, N. Wunderling, J. Yin, K. Zickfeld, J. Zscheischler, 2023: Ten New Insights in Climate Science 2023/2024. ***Global Sustainability***, DOI: 10.1017/sus.2023.25.

47. Cai, Z., Q. You, H. W. Chen, R. Zhang, Z. Zuo, G. Dai, **D. Chen**, J. Cohen, O. Zolina， S. K. Gulev，2023: Interdecadal variability of the warm Arctic-cold Eurasia pattern linked to the Barents oscillation. ***Atmospheric Research***, 287: 106712. https://doi.org/10.1016/j.atmosres.2023.106712.
48. Chen, A., H. Huang, J. Wang, **D. Chen**, J. Liu, 2023: An analysis of the spatial variation of tropical cyclone rainfall trends in Mainland Southeast Asia. ***International Journal of Climatology***, 43(13): 5912-5926. DOI: 10.1002/joc.8180.
49. Cui, H., Y. Lu, Y. Zhou, G. He, S. Song, S. Yang, R. Wang, S. Wang, G. Han, X. Yi, D. Du, N.C. Stenseth, D.O. Hessen, **D. Chen**, Y. Cheng, 2023: Carbon flow through continental scale ground logistics transportation. ***iScience***, 26(1). DOI: 10.1016/j.isci.2022.105792.
50. Engström, J. E., L. Wern, S. Hellström, E. Kjellström, C. Zhou, **D. Chen**, and C. Azorin-Molina, 2023: Data rescue of historical wind observations in Sweden since the 1920s. ***Earth Syst. Sci. Data*** 15, 2259–2277. DOI: 10.5194/essd-15-2259-2023.
51. Fan L.-J., Z.-W. Yan, **D. Chen**, Z. Li, 2023: Assessment of total and extreme precipitation over central Asia via statistical downscaling: added value and multi-model ensemble projection, ***Advances in Climate Change Research***, 14(1): 62-76. DOI: 10.1016/j.accre.2023.01.004.
52. Gao, C., C. Shi, Y. Lou, R. An, C. Sun, G. Wu, Y. Zhang, M. Shen, **D. Chen**, 2023: Estimating summer arctic warming amplitude relative to pre-industrial level using tree rings. ***Forests***, 14(2): 418. DOI: 10.3390/f14020418.
53. Gao, K., Y. Tang, **D. Chen**, J. Wang, A. Duan, 2023: Influence of arctic sea ice and interdecadal pacific oscillation on the recent increase of winter extreme snowfall in northeast China. ***Atmospheric Research***, 295: 107030. DOI: 10.1016/j.atmosres.2023.107030.
54. Gao, K., J. Wang, **D. Chen**, W. Hu, X. Zhang, A. Duan, X. Zhang, 2023: Synoptic climate settings and moisture supply for the extreme heavy snowfall in Northern China during 6–8 November 2021. ***Journal of Meteorological Research***, 37(1), 75-89, DOI: 10.1007/s13351-023-2123-9.
55. Hu, Y., W. Sun, J. Liu, **D. Chen**, L. Ning, Z. Peng, 2023: Decadal variability of precipitation over the Tibetan Plateau modulated by the 11-year solar cycle over the past millennium. ***Front. Earth Sci.*** 11:1137205. DOI: 10.3389/feart.2023.1137205.
56. Huang, Z., Y.-F. Sang, **D. Chen**, V. P. Singh, 2023: Clarification of dominating divers for streamflow changes in the upper reach of Mekong River Basin. ***Journal of Hydrology: Regional Studies***, 48: 101456. DOI: 10.1016/j.ejrh.2023.101456.
57. Jiang, H., Y. Yi, J. Xu, **D. Chen**, F. Lu, R. Li, X. Wang, B. Zhou, 2023: Characterizing precipitation uncertainties in a high-altitudinal permafrost watershed of the Tibetan Plateau based on regional water balance and hydrological model simulations. ***Journal of Hydrology: Regional Studies***, 47: 101445. DOI: 10.1016/j.ejrh.2023.101445.
58. Jiang, R., H. Lu, K. Yang, **D. Chen,** J. Zhou, D. Yamazaki, M. Pan, W. Li, N. Xu, Y. Yang, D. Guan, F. Tian, 2023: Substantial increase in future fluvial flood risk projected in China's major urban agglomerations. ***Communications Earth & Environment***, 4(1): 389. DOI: 10.1038/s43247-023-01049-0.
59. Jin, Y., S. Hu, A. D. Ziegler, L. Gibson, J. E. Campbell, R. Xu, **D. Chen**, K. Zhu, Y. Zheng, B. Ye, F. Ye, Z. Zeng, 2023: Energy production and water savings from floating solar photovoltaics on global reservoirs. ***Nature Sustainability***, 1-10. DOI: 10.1038/s41893-023-01089-6.
60. Kukulies, K., H.-W. Lai, J. Curio, Z. Feng, C. Lin, P. Li, T. Ou, S. Sugimoto, **D. Chen**, 2023: Mesoscale convective systems in the Third Pole region: Characteristics, mechanisms and impact on precipitation. ***Front. Earth Sci.*** 11:1143380, DOI: 10.3389/feart.2023.1143380.
61. Kukulies, J. A. F. Prein, J. Curio, H. Yu, **D. Chen**, 2023: Kilometer-scale multi-model and multi-physics ensemble simulations of a mesoscale convective system in the lee of the Tibetan Plateau: Implications for climate simulations. ***Journal of Climate***, 1-56. DOI: 10.1175/JCLI-D-22-0240.1.

62. Li, X., L. Wang, **D. Chen**, L. Thompson, K. Yang, S. Zhong, L. Liu, Z. Xu, L. Song, 2023: Large-scale circulation dominated precipitation variation and its effect on potential water availability across the Tibetan Plateau. ***Environmental Research Letters***, DOI 10.1088/1748-9326/acdd15.
63. Li, X., L. Wang, B. Hu, **D. Chen**, R. Liu, 2023: Contribution of vanishing mountain glaciers to global and regional terrestrial water storage changes. ***Front. Earth Sci.*** 11, DOI: 10.3389/feart.2023.1134910.
64. Li, Y., W. Zhang, C. R. Schwalm, P. Gentine, W. K. Smith, P. Ciais, J. S. Kimball, A. Gazol, S. A. Kannenberg, A. Chen, S. Piao, H. Liu, **D. Chen**, X. Wu, 2023: Widespread vegetation phenology effects on drought recovery of Northern Hemisphere ecosystems. ***Nature Climate Change***, 13(2): 182-188. DOI: 10.1038/s41558-022-01584-2.
65. Li, Z., Q. Feng, X. Wang, Z. Li, Q.J. Wang, **D. Chen**, B. Zhang, J. Gui, 2023: Accelerated multiphase water transformation in global mountain regions since 1990. o ***The Innovation Geoscience***, 1(3), 100033. DOI: 10.59717/j.xinn-geo.2023.100033.
66. Lin, Q., J. Chen, T. Ou, H.-W. Lai, A. F. Prein, **D. Chen**, 2023: Performance of the WRF model at the convection-permitting scale in simulating snowfall and lake-effect snow over the Tibetan Plateau. ***Journal of Geophysical Research: Atmospheres***, 128(16): e2022JD038433. DOI: 10.1029/2022JD038433.
67. Liu, T., D. Chen, L. Yang, J. Meng, Z. Wang, J. Ludescher, J. Fan, S. Yang, **D. Chen**, J. Kurths, X. Chen, S. Havlin, H. J. Schellnhuber, 2023: Teleconnections among Tipping Elements in the Earth System. ***Nature Climate Change***, 13(1): 67-74. DOI: 10.1038/s41558-022-01558-4***.***
68. Liu, X., M.-X. Yang, N.-P. Dong, W.-N. Xie, H.-G. Li, Z. Guan, F. Wen, H. Wang, **D. Chen**, 2023: Increased southerly and easterly water vapor transport contributed to the dry-to-wet transition of summer precipitation over the Three-River Headwaters in the Tibetan Plateau. ***Advances in Climate Change Research***, 14(4): 502-510. DOI: 10.1016/j.accre.2023.07.005.
69. Lu, Z., **D. Chen**, K. Wyser, R. F. Franco, S. Olin, Q. Zhang, M. Wu, A. Ahlström, 2023: Natural decadal variability of global vegetation growth in relation to major decadal climate modes. ***Environmental Research Letters***, 18(1): 014033. DOI: 10.1088/1748-9326/acacb4.
70. Luo, H., Z. Wang, C. He, **D. Chen**, and S. Yang: 2024: Future changes in South Asian summer monsoon circulation under global warming: Role of the Tibetan Plateau heating. ***npj Climate and Atmospheric Science***. In press.
71. Ma, M., J. Tang, T. Ou, **D. Chen**, 2023: Sub-daily extreme precipitation and its linkage to global warming over the Tibetan Plateau. ***Journal of Geophysical Research – Atmospheres***, 128(18): e2023JD039062. DOI: 10.1029/2023JD039062.
72. Minola, L., G. Zhang, T. Ou, J. Kukulies, J. Curio, J. A. Guijarro, K. Deng, C. Azorin-Molina, C. Shen, A. Pezzoli, **D. Chen**, 2023: Climatology of near-surface wind speed from observational, reanalysis and high-resolution regional climate model data over the Tibetan Plateau. ***Climate Dynamics***. DOI: 10.1007/s00382-023-06931-3.
73. Minola, L., J. Lönn, C. Azorin-Molina, C. Zhou, E. Engström, L. Wern, S. Hellström, G. Zhang, C. Shen, A. Pezzoli, **D. Chen**, 2023: The contribution of large-scale atmospheric circulation to variations of observed near-surface wind speed across Sweden since 1926. ***Climatic Change***, 176(5): 54. DOI: 10.1007/s10584-023-03525-0.
74. Mu, W., X. Wu, J. Martínez, Y. Fu, J.-G. Huang, X. Li, **D. Chen**, 2023: Photoperiod drives wood formation cessation of northern conifers. ***Global Ecology and Biogeography***, 32(4): 603-617. DOI: 10.1111/geb.13647.
75. Niu, J., P. Xie, Y.-F. Sang, L. Zhang, L. Wu, Y. Zhu, B. Sivakumar, J. Huo, **D. Chen**, 2023: Quantification of long-range dependence in hydroclimatic time series: a method-comparison study. ***Journal of Applied Meteorology and Climatology***. DOI: https://doi.org/10.1175/JAMC-D-23-0129.1
76. Ou, T., **D. Chen**, J. Tang, C. Lin, X. Wang, J. Kukulies, H.-W. Lai, 2023: Wet bias of summer precipitation in the northwestern Tibetan Plateau in ERA5 is linked to overestimated lower-level southerly wind over the plateau. ***Climate Dynamics.*** DOI: 10.1007/s00382-023-06672-3.
77. Pan, Y., J. Yang, **D. Chen**, T. Zhu, Q. Bao, P. Mahmoudi, 2023: Skillful seasonal prediction of summer wildfires over Central Asia. ***Global and Planetary Change***, 221: 104043. DOI: 10.1016/j.gloplacha.2023.104043.

78. Perera, A.T.D., K. Javanroodi, D. Mauree, V. M. Nik, P. Florio, T. Hong, **D. Chen**, 2023: Challenges resulting from urban density and climate change for the EU energy transition. ***Nature Energy***. DOI: 10.1038/s41560-023-01232-9.
79. Qiu, Y., J. Chen, **D. Chen**, W. Li, L. Qiong, 2023: Lake area expansion alters downwind precipitation patterns on the Tibetan Plateau: Insights from the most dramatically expanded lake. ***Journal of Geophysical Research: Atmospheres***, 128(15): e2023JD039274. DOI: 10.1029/2023JD039274.
80. Shen, C., H. Yuan, Z. Li, X. Yang, L. Minola, Y. Chang, **D. Chen**, 2023: March Near-surface Wind Speed Hiatus over China since 2011. ***Geophysical Research Letters***, 50(15): e2023GL104230. DOI: 10.1029/2023GL104230.
81. Song, Y., G. Zhou, H. W. Linderholm, J. Wang, Y. Li, G. Wang, Y. Fu, J. Xu, Y. Shi, Y. Xu, H. Gao, **D. Chen**, 2023: Growth of winter wheat adapting to climate warming may face more low-temperature damage. ***International Journal of Climatology*** 43(4), 1970-1979. DOI: 10.1002/joc.7956.
82. Su, B., H. Zhao, H. Ma, C. Zhang, **D. Chen**, B. Chen, Y. Huang, S.-W. Liu, T. Zhang, C. Xiao, 2023: Changes in Supply and Demand Potentials of China's Glacier Water Resources in the 21st century: Spatiotemporal Mismatches and Combined Effects. ***Advances in Climate Change Research***, 14(5): 746-757. DOI: 10.1016/j.accre.2023.09.010.
83. Wang, C.-Y., Y.-L. Song, H. W. Linderholm, Y. Li, B.-T. Zhang, J. Du, F.-X. Li, M.-T. Wang, R.-Y. Wang, Y. Zhu, J.-X. Xu, Y.-G. Guo, **D. Chen**, 2023: The influence of increasing temperatures on highland barley yields and on the maximum cultivation altitude on the Tibetan Plateau. ***Advances in Climate Change Research***, 14(4): 573-579. DOI: 10.1016/j.accre.2023.08.001.
84. Wang, J., W. Sun, J. Liu, L. Ning, M. Yan, **D. Chen**, Y. Ma, 2023: Impact of centennial-scale solar activity reduction on the weakened Asian monsoon event at 9.2 ka BP, ***Palaeogeography, Palaeoclimatology, Palaeoecology***, 628: 111771. DOI: 10.1016/j.palaeo.2023.111771.
85. Wang, L., H. Liu, J. Grießinger, **D. Chen**, C. Sun, C. Fang, 2023: Enhanced variability and declining trend of soil moisture since the 1880s on the southeastern Tibetan Plateau. ***Water Resources Research***, 59(3): e2022WR033953. DOI: 10.1029/2022WR033953.
86. Wang, S., B. He, H. W. Chen, **D. Chen**, Y. Chen, W. Yuan, F. Shi, J. Duan, W. Wu, T. Chen, L. Guo, Z. Zhong, W. Duan, Z. Li, W. Jiang, L. Huang, X. Hao, R. Tang, H. Liu, Y. Zhang, X. Xie, 2023: Fire carbon emissions over Equatorial Asia reduced by shortened dry seasons. ***npj climate and atmospheric science***, 6(1): 129. DOI: 10.1038/s41612-023-00455-7.
87. Wang, W., S. Yin, Z. He**, D. Chen**, H. Wang, A. Klik, 2023: Projections of rainfall erosivity in climate change scenarios for mainland China. ***CATENA***, 232: 107391. DOI: 10.1016/j.catena.2023.107391.
88. Wang, Y., H. Wang，P. Cui, **D. Chen**, J. Tang, T. Ou，J. Hao, J. Wang, G. Zhang, Y. Lei, and C. Wu, 2023: Disaster effects of climate change and the associated scientific challenges. ***Chinese Science Bulletin***. DOI: 10.1360/TB-2023-0325.
89. Wen, Q., C. Zhu, **D. Chen**, M. Liu, L. Ning, M. Yan, J. Liu, Z. Liu, 2023: Separating direct heat flux forcing and freshwater feedback on AMOC change under global warming. ***Geophysical Research Letters***, 50(22): e2023GL105478. DOI: 10.1029/2023GL105478.
90. Wu, X., X. Jiang, H. Liu, C. Allen, X. Li, P. Wang, Z. Li, Y. Yang, S. Zhang, F. Shi, J. Zhu, P. Yu, M. Zhou, P. Zhao, Y. Wang, C. Yue, **D. Chen**, 2023: CPSDv0: A forest stand structure database for plantation forests in China. ***Big Earth Data***, 7(1), 222-240, DOI: 10.1080/20964471.2021.2012911.
91. Xu, R., Z. Zeng, M. Pan, A. D. Ziegler, J. Holden, D. V. Spracklen, L. E. Brown, X. He, **D. Chen**, B. Ye, H. Xu, S. Jerez, C. Zheng, J. Liu, P. Lin, Y. Yang, J. Zou, D. Wang, M. Gu, Z. Yang, Z. Yang, D. Li, J. Huang, V. Lakshmi, E. F. Wood, 2023: A global-scale framework for hydropower development incorporating strict environmental constraints. ***Nature Water***, 1(1): 113-122. DOI: 10.1038/s44221-022-00004-1.
92. Xu, X., X. Yun, Q. Tang, H. Cui, J. Wang, L. Zhang, **D. Chen**, 2023: Projected seasonal changes in future rainfall erosivity over the Lancang-Mekong River Basin under the CMIP6 scenarios. ***Journal of Hydrology***, 620: 129444. DOI: 10.1016/j.jhydrol.2023.129444.
93. Yao, R., S. Li, **D. Chen**, 2023: Runoff response to climate in two river basins supplied by small glacier meltwater in southern and northern Tibetan Plateau. ***Atmosphere***, 14, 711, DOI: 10.3390/atmos14040711.

94. Yu, Y., Q. You, Z. Zuo, Y. Zhang, Z. Cai, W. Li, Z. Jiang, S. Ulla, X. Tang, R. Zhang, **D. Chen**, P. Zhai, S. Shrestha, 2023: Compound climate extremes in China: trends, causes, and projections. ***Atmospheric Research***, 286, 106675. DOI: 10.1016/j.atmosres.2023.106675
95. Yun, H., Q. Zhu, J. Tang, W. Zhang, **D. Chen**, P. Ciais, Q. Wu, B. Elberling, 2023: Warming, permafrost thaw and increased nitrogen availability as drivers for plant composition and growth across the Tibetan Plateau. ***Soil Biology and Biochemistry***, 182: 109041**.** DOI: 10.1016/j.soilbio.2023.109041.
96. Zhang, C., **D. Chen**, Q. Tang, J. Huang, 2023: Fate and changes in moisture evaporated from the Tibetan Plateau (2000-2020). ***Water Resources Research***, 59(11): e2022WR034165. DOI: 10.1029/2022WR034165.
97. Zhang, J., Q. You, G. Ren, S. Ullah, I. Normatov, **D. Chen**, 2023: Inequality of global thermal comfort conditions changes in a warmer world. ***Earth's Future***. 11, e2022EF003109. DOI: 10.1029/2022EF003109.
98. Zheng, X., Y. Lu, C. Ma, J. Yuan, N. Chr. Stenseth, Dag O. Hessen, H. Tian, **D. Chen**, Y. Chen, S. Zhang, 2023: Greenhouse gas emissions from extractive industries in a globalized era. ***Journal of Environmental Management***, 343, 118172, DOI: 10.1016/j.jenvman.2023.118172.
99. Zhong, Z., B. He, H. W. Chen, **D. Chen**, T. Zhou, W. Dong, C. Xiao, S.-P. Xie, X. Song, L. Guo, R. Ding, L. Zhang, L. Huang, W. Yuan, X. Hao, D. Ji, X. Zhao, 2023: Reversed asymmetric warming of sub-diurnal temperature over land during recent decades. ***Nature Communications***, 14:7189, DOI: 10.1038/s41467-023-43007-6.
100. Zhong, Z., B. He, Y.-P. Wang, H. W. Chen, **D. Chen**, Y. H. Fu, Y. Chen, L. Guo, Y. Deng, L. Huang, W. Yuan, X. Hao, R. Tang, H. Liu, L. Sun, X. Xie, Y. Zhang, 2023: Disentangling the effects of vapor pressure deficit on northern terrestrial vegetation productivity. ***Science Advances***, 343, 118172, DOI: 10.1126/sciadv.adf3166.
101. Zhu, Y., Y.-F. Sang, B. Wang, A. Lutz, S. Hu, **D. Chen**, V. P. Singh, 2023: Heterogeneity in spatiotemporal variability of High Mountain Asia's runoff and its underlying mechanisms. ***Water Resources Research***, 59(7): e2022WR032721. DOI: 10.1029/2022WR032721.
102. Cai, Z., Q. You, H. Chen, R. Zhang, **D. Chen**, J. Chen, S. Kang, J. Cohen, 2022: Amplified wintertime Barents Sea warming linked to intensified Barents Oscillation. ***Environmental Research Letters***, 17(4): 044068. DOI: 10.1088/1748-9326/ac5bb3.
103. Chai, C., L. Wang, **D. Chen,** J. Zhou, H. Liu, J. Zhang, Y. Wang, T. Chen, R. Liu, 2022: Future snow changes and their impact on the upstream runoff in Salween. ***Hydrology and Earth System Sciences***, 26, 4657-4683. DOI: 10.5194/hess-26-4657-2022.
104. Chen, A., A. Chen, O. Varis, **D. Chen**, 2022: Large net forest loss in Cambodia's Tonle Sap Lake protected areas during 1992-2019. ***Ambio***, 51(8): 1889-1903. DOI: 10.1007/s13280-022-01704-4.
105. Chen, T., G. Gao, **D. Chen**, D. Bian, 2022: Comprehensive applicability evaluation of multi-source snow depth datasets over the Tibetan Plateau. ***Journal of Glaciology and Geocryology*** 44(3), 795-809. DOI: DOI: 10.7522/j.issn.1000-0240.2022.0078. (in Chinese with English abstract)
106. Chen, Z.-T., H.-Y. Liu, C.-Y. Xu, X.-C. Wu, B.-Y. Liang, J. Cao, **D. Chen**, 2022: Deep learning predicts future warming-induced vegetation growth changes under SSP scenarios. ***Advances in Climate Change Research***, 13(2): 251-257. DOI: 10.1016/j.accre.2022.01.007.
107. Deng, K., C. Azorin-Molina, S. Yang, C. Hu, G. Zhang, L. Minola, **D. Chen**, 2022: Changes of Southern Hemisphere westerlies in the future warming climate. ***Atmospheric Research***, 270: 106040, DOI: 10.1016/j.atmosres.2022.106040.
108. Deng, K.-Q., C. Azorin-Molina, S. Yang, C.-D. Hu, G.-F. Zhang, L. Minola, S. Vicente-Serrano, **D. Chen**, 2022: Shifting of summertime weather extremes in Western Europe during 2012-2020. ***Advances in Climate Change Research***, 13, 218-227, DOI: 10.1016/j.accre.2022.01.008.
109. Deng, K., C. Azorin-Molina, S. Yang, G. Zhang, L. Minola, **D. Chen**, 2022: Terrestrial stilling will likely continue during the 21st century. ***Earth's Future***, 10, e2021EF002448. DOI: 10.1029/2021EF002448.
110. Ehlers, T. A., **D. Chen**, E. Appel, T. Bolch, F. Chen, B. Diekmann, M. Giese, G. Guggenberger, H.-W. Lai, X. Li, J. Liu, Y. Liu, Y. Ma, G. Miehe, V. Mosbrugger, A. Mulch, S. Piao, A. Schwalb, L. G. Thompson, Z. Su, H. Sun, T. Yao, X. Yang, K. Yang, L. Zhu, 2022: Past, present, and future geo-

biosphere interactions on the Tibetan Plateau and implications for permafrost. ***Earth Science Reviews***, 104197. DOI: 10.1016/j.earscirev.2022.104197.

111. Fan, X., L. Wang, X. Li, J. Zhou, **D. Chen**, H. Yang, 2022: Increased discharge across the Yellow River Basin in the 21st century was dominated by precipitation in the headwater region. ***Journal of Hydrology: Regional Studies***, 44, 101230, DOI: 10.1016/j.ejrh.2022.101230.
112. Fang, K., M. Bai, C. Azorin-Molina, Z. Dong, J. J. Camarero, P. Zhang, Z. Zheng, Z. Zhao, **D. Chen**, 2022: Wind speed reconstruction from a tree-ring difference index in northeastern Inner Mongolia. ***Dendrochronologia***, 72, 125938**.** DOI: 10.1016/j.dendro.2022.125938.
113. Fang, M., X. Li, H.W. Chen, **D. Chen**, 2022: Arctic amplification modulated by Atlantic Multidecadal Oscillation and greenhouse forcing on multidecadal to century scales. ***Nature Communications***, 13:1865. DOI: 10.1038/s41467-022-29523-x.
114. Gao, K., A. Duan, **D. Chen**, J. Wang, B. Tang, 2022: Arctic autumn warming since 2002 dominated by changes in moisture modulated by multiple large-scale atmospheric circulations. ***Atmospheric Research***, 265, 105879. DOI: 10.1016/j.atmosres.2021.105879.
115. He, B., C. Chen, S. Lin, W. Yuan, H. W. Chen, **D. Chen**, Y. Zhang, L. Guo, X. Zhao, X. Liu, Z. Zhong, R. Eang, R. Tang, 2022: Worldwide impacts of atmospheric vapor pressure deficit on terrestrial carbon sinks. ***National Science Review***, nwab150, DOI: 10.1093/nsr/nwab150.
116. He, B., Z. Zhong, **D. Chen**, J. Liu, Y. Chen, C. Miao, W. Yuan, L. Guo, L. Huang, X. Hao, A. Chen, 2022: Lengthening dry spells intensify summer heatwaves. ***Geophysical Research Letters***, 49(19): e2022GL099647. DOI: 10.1029/2022GL099647.
117. He, M., K. Fang, F. Zhou, T. Ou, **D. Chen**, 2022: A delayed modulation of ultraviolet radiation on the COVID-19 transmission reflects an incubation period. ***Meteorological Applications***, 29(5): e2099. DOI: 10.1002/met.2099.
118. Hu, Z., **D. Chen**, X. Chen, Q. Zhou, Y. Peng, 2022: CCHZ-DISO: A timely new assessment system for data quality or model performance from Da Dao Zhi Jian. ***Geophysical Research Letters***, 49(23): e2022GL100681. DOI: 10.1029/2022GL100681.
119. Ikram, F., K. Ullah, **D. Chen**, 2022: Evaluation of three genesis potential indices for tropical cyclogenesis in the Arabian Sea: two case studies using WRF and ERA5. ***Monthly Weather Review***, 150(12): 3275-3303. DOI: 10.1175/MWR-D-22-0048.1.
120. Irannezhad, M., B. Ahmadi, J. Liu, **D. Chen**, J. H. Matthews, 2022: Global water security: a shining star in the dark sky of achieving the sustainable development goals. ***Sustainable Horizons***, 1, 100005, DOI: 10.1016/j.horiz.2021.100005.
121. Irannezhad, M., M. S. Tahami, B. Ahmadi, J. Liu, **D. Chen**, 2022: Compound climate extreme events threaten migratory birds' conservation in western U.S. ***Sustainable Horizons***, 3, 100023, DOI: 10.1016/j.horiz.2022.100023.
122. Irannezhad, M., J. Liu, **D. Chen**, 2022: Extreme precipitation variability across the Lancang-Mekong River Basin during 1952-2015 in relation to teleconnections and summer monsoons. ***International Journal of Climatology***, 42:2614–2638, DOI: 10.1002/joc.7370.
123. Jin, Z., Q. You, N. Pepin, **D. Chen**, L. Li, G. Sun, Z. Zuo, M. Li, P. Zhai, 2022: Increased ecohydrological drying over terrestrial ecosystems. ***Atmospheric Research***, 277: 106308. DOI: 10.1016/j.atmosres.2022.106308.
124. Jung, M.-I., S.-W. Son, H. Kim, **D. Chen**, 2022: Tropical modulation of East Asia air pollution. ***Nature Communications***, 13:5580. DOI: 10.1038/s41467-022-33281-1.
125. Li, D., Y. Qi, **D. Chen**, 2022: Changes in rain and snow over the Tibetan Plateau based on IMERG and ground-based Observation. ***Journal of Hydrology***. 606: 127400, DOI: 10.1016/j.jhydrol.2021.127400.
126. Li, J., Y. Zhao, **D. Chen**, H. Wang, 2022: Future precipitation changes in three key sub-regions of East Asia: the roles of thermodynamics and dynamics? ***Climate Dynamics***. DOI: 10.1007/s00382-021-06043-w.
127. Liao, Y., **D. Chen**, Z. Han, D. Huang, 2022: Downscaling of future precipitation in China's Beijing-Tianjin-Hebei region using a weather generator. ***Atmosphere***, 13, 22. DOI: 10.3390/atmos13010022.

128. Lin, C., E. Kjellström, R. A. I. Wilcke, **D. Chen**, 2022: Present and future European heat wave magnitudes: climatologies, trends, and their associated uncertainties in GCM-RCM model chains. ***Earth System Dynamics***, 13, 1197–1214. DOI: 10.5194/esd-13-1197-2022.
129. Lin, Q., J. Chen, **D. Chen**, X. Wang, W. Li, D. Scherer, 2022: Impacts of bias-corrected ERA5 initial snow depth on long-term regional climate simulation for the Tibetan Plateau. ***Journal of Geophysical Research – Atmospheres***, 126(23): e2021JD035625. DOI: 10.1029/2021JD035625.
130. Liu, J., **D. Chen**, G. Mao, M. Irannezhad, Y. Pokhrel, 2022: Past and future changes in climate and water resources in the Lancang-Mekong River basin: current understanding and future research directions. ***Engineering***, 13, 144-152, DOI: 10.1016/j.eng.2021.06.026.
131. Liu, Y., Z. Zeng, R. Xu, A. D. Ziegler, S. Jerez, **D. Chen**, C. Azorin-Molina, L. Zhou, X. Yang, H. Xu, L. Li, L. Dong, F. Zhou, R. Cao, J. Liu, B. Ye, X. Kuang, and X. Yang, 2022: Increases in China's wind energy production from the recovery of wind speed since 2012. ***Environmental Research Letters***, 17, 114035. DOI: 10.1088/1748-9326/ac9cf4.
132. Minola, L., H. Reese, H.-W. Lai, C. Azorin-Molina, J. A. Guijarro, S.-W. Son, **D. Chen**, 2022: Wind stilling-reversal across Sweden: The impact of land-use and large-scale atmospheric circulation changes. ***International Journal of Climatology***, 42, 1049–1071, DOI: 10.1002/joc.7289.
133. Pang, G., **D. Chen**, X. Wang, H.-W. Lai, 2022: Spatiotemporal variations of land surface albedo and associated influencing factors on the Tibetan Plateau. ***Science of the Total Environment***, 804: 150100. DOI: 10.1016/j.scitotenv.2021.150100.
134. Pang, P., P. Zhang, S. Wu, J. Jouzel, H. C. Steen-Larsen, K. Liu, W. Zhang, J. Yu, C. An, **D. Chen**, S. Hou, 2022: The dominant role of Brewer–Dobson circulation on 17O-excess variations in snow pits at Dome A, Antarctica. ***Journal of Geophysical Research: Atmospheres***, 127(13): e2022JD036559. DOI: 10.1029/2022JD036559.
135. Pei, L., Z. Yan, **D. Chen**, S. Miao, 2022: The contribution of human-induced atmospheric circulation changes to the record-breaking winter precipitation event over Beijing in February 2020. ***Bulletin of the American Meteorological Society***, 103(3): S55-S60. DOI: 10.1175/BAMS-D-21-0153.1.
136. Prein, A. F., N. Ban, T. Ou, J. Tang, K. Sakaguchi, E. Collier, S. Jayanarayanan, L. Li, S. Sobolowski, X. Chen, X. Zhou, H.-W. Lai, S. Sugimoto, L. Zou, S. ul Hasson, M. Ekstrom, P. K. Pothapakula, B. Ahrens, R. Stuart, H. C. Steen-Larsen, R. Leung, D. Belusic, J. Kukulies, J. Curio, **D. Chen**, 2022: Towards Ensemble-Based Kilometer-Scale Climate Simulations over the Third Pole Region. ***Climate Dynamics***, 60(11-12): 4055-4081. DOI: 10.1007/s00382-022-06543-3.
137. Qi, W., L. Feng, X. Kuang, C. Zheng, J. Liu, **D. Chen**, Y. Tian, Y. Yao, 2022: Divergent and changing importance of glaciers and snow as natural water reservoirs in the eastern and southern Tibetan Plateau. ***Journal of Geophysical Research – Atmospheres***, 127(7): e2021JD035888. DOI: 10.1029/2021JD035888.
138. Qi, W., L. Feng, H. Yang, J. Liu, Y. Zheng, H. Shi, L. Wang, **D. Chen**, 2022: Economic growth dominates rising potential flood risk in the Yangtze River and benefits of raising dikes from 1991 to 2015, ***Environmental Research Letters***, 17(3): 034046. DOI: 10.1088/1748-9326/ac5561.
139. Qi, W., J. Liu, H. Yang, **D. Chen**, L. Feng, 2022: Assessments and corrections of GLDAS2.0 forcing data in four large transboundary rivers in the Tibetan Plateau and Northeast China. ***Earth and Space Science,*** 9, e2020EA001576. DOI: 10.1029/2020EA001576.
140. Shaw, T E., E. S. Miles, **D. Chen**, A. Jouberton, M. Kneib, S. Fugger, T. Ou, H.-W. Lai, K. Fujita, W. Yang, S. Fatichi, F. Pellicciotti, 2022: Multi-Decadal Monsoon Characteristics and Glacier Response in High Mountain Asia. ***Environmental Research Letters.*** 17**,** 104001, DOI: 10.1088/1748-9326/ac9008.
141. Shen, C., J. Zha, Z. Li, C. Azorin-Molina, K. Deng, L. Minola1, **D. Chen**, 2022: Evaluation of global terrestrial near-surface wind speed simulated by CMIP6 models and their future projections. ***Ann NY Acad Sci***, 1518(1): 249-263. DOI: 10.1111/nyas.14910.
142. Shen, T, W. Sun, J. Liu, B. Wang, **D. Chen**, L. Ning, K. Chen, 2022: Shen, T, W. Sun, J. Liu, B. Wang, **D. Chen**, L. Ning, K. Chen, 2022: Secular changes of the decadal relationship between the Northern Hemisphere land monsoon rainfall and sea surface temperature over the past millennium climate model simulations. ***Journal of Geophysical Research: Atmospheres***, 127(23): e2022JD037065. DOI: 10.1029/2022JD037065.

143. Slättberg, N., H.-W. Lai, X. Chen, Y. Ma, **D. Chen**, 2022: Spatial and temporal patterns of planetary boundary layer height during 1979–2018 over the Tibetan Plateau using ERA5. ***International Journal of Climatology***, 42:3360–3377. DOI: 10.1002/joc.7420.
144. Song, S., C. Wang, H. W. Linderholm, Y. Fu, W. Cai, J. Xu, L. Zhuang, M. Wu, Y. Shi, G. Wang, **D. Chen**, 2022: The negative impact of increasing temperatures on rice yields in southern China. ***Science of the Total Environment***, 820 153262, DOI: 10.1016/j.scitotenv.2022.153262
145. Su, B., C. Xiao, **D. Chen**, Y. Huang, Y. Che, H. Zhao, M. Zou, R. Guo, X. Wang, X. Li, W. Guo, S. Liu, T. Yao, 2022: Glacier change in China over past decades: spatiotemporal patterns and influencing factors. ***Earth-Science Reviews***, 226, 103926, DOI: 10.1016/j.earscirev.2022.103926.
146. Su, B., C. Xiao, **D. Chen**, X. Ying, Y. Huang, R. Guo, H. Zhao, A. Chen, Y. Che, 2022: Mismatch between the population and meltwater developments creates opportunities and risks for global glacier-fed basins. ***Science Bulletin***, 67, 9-12. DOI: 10.1016/j.scib.2021.07.027.
147. Su, B., C. Xiao, H. Zhao, Y. Huang, T. Dou, X. Wang, **D. Chen**, 2022: Estimated changes in different forms of precipitation (snow, sleet, and rain) across China: 1961-2016. ***Atmospheric Research***, 270, 106078, DOI: 10.1016/j.atmosres.2022.106078.
148. Su, F., H. D. Pritchard, T. Yao, J. Huang, T. Ou, F. Meng, H. Sun, Y. Li, **D. Chen**, 2022: Contrasting fate of western High Mountain Asia's water resources under 21st century climate change. ***Earth's Future***, 10(9): e2022EF002776. DOI: 10.1029/2022EF002776.
149. Sun, H., T. Yao, F. Su, Z. He, G. Tang, N. Li, B. Zheng, J. Huang, F. Meng, T. Ou, **D. Chen**, 2022: Corrected ERA5 precipitation by machine learning significantly improved flow simulations for the Third Pole basins. ***Journal of Hydrometeorology***, 23(10): 1663-1679. DOI: https://doi.org/10.1175/JHM-D-22-0015.1.
150. Sun, S., G. Gao, Y. Li, X. Zhou, D. Huang, **D. Chen**, Y. Li, 2022: A comprehensive risk assessment of Chinese high-speed railways affected by multiple meteorological hazards. ***Weather and Climate Extremes***, 38: 100519. DOI: 10.1016/j.wace.2022.100519.
151. Sun, S., P. Shi, Q. Zhang, J. Wang, J. Wu, **D. Chen**, 2022: Evolution of future precipitation extremes: viewpoint of climate change classification. ***International Journal of Climatology***, 42, 1220-1230, DOI: 10.1002/joc.7298.
152. Sun, W., J. Liu, B. Wang, **D. Chen**, C. Gao, 2022: Pacific multidecadal (50-70 year) variability instigated by volcanic forcing during the Little Ice Age (1250-1850). ***Climate Dynamics***, 59(1-2): 231-244. DOI: 10.1007/s00382-021-06127-7.
153. Sun, W., J. Liu, B. Wang, **D. Chen**, L. Wan, J. Wang, 2022: Holocene multi-centennial variations of the Asian summer monsoon triggered by solar activity. ***Geophysical Research Letters***, 49, e2022GL098625. DOI: 10.1029/2022GL098625.
154. Tang, R., B. He, H. W. Chen, **D. Chen**, Y. Chen, Y. H. Fu, W. Yuan, B. Li, Z. Li, L. Guo, X. Hao, L. Sun, H. Liu, C. Sun, Y. Yang, 2022: Increasing terrestrial ecosystem carbon release in response to autumn cooling and warming. ***Nature Climate Change***, 12, 380-385, DOI: 10.1038/s41558-022-01304-w.
155. Ullah, S., Q. You, **D. Chen**, D.A. Sachindra, A. AghaKouchak, S. Kang, M. Li, P. Zhai, W. Ullah, 2022: Future population exposure to daytime and nighttime heat waves in South Asia. ***Earth's Future***, 10, e2021EF002511, DOI: 10.1029/2021EF002511.
156. Wang, J., Q. Tang, A. Chen, Y. Tang, X. Xu, X. Yun, M. Mu, N. Wright, **D. Chen**, 2021: Impacts of summer monsoons on flood characteristics in the Lancang-Mekong River basin. ***Journal of Hydrology***, DOI: 10.1016/j.jhydrol.2021.127256.
157. Wang, L., H. Liu, **D. Chen**, P. Zhang, S. Leavitt, Y. Liu, C. Fang, C. Sun, Q. Cai, B. Liang, L. Shi, F. Liu, Y. Zheng, Z. Gui, P. Cherubini, J. Grießinger, 2022: The 1820s marks a significant shift towards hotter-drier summers in West Europe since 1360. ***Geophysical Research Letters***, 49(15): e2022GL099692. DOI: 10.1029/2022GL099692.
158. Wang, L., H. Liu, X. Zhong, J. Zhou, L. Zhu, T. Yao, C. Xie, J. Ju, **D. Chen**, K. Yang, L. Zhao, S. Lu, S. Khanal, J. Jin, W. Liu, B. Liu, Y. Du, X. Yao, Y. Lei, G. Zhang, S. Nepal, 2022: Domino effect of a natural cascade alpine lake system on the Third Pole. ***PNAS Nexus***, 1, pgac053. DOI: 10.1093/pnasnexus/pgac053.

159. Wang, X., Y Ran, G. Pang, **D. Chen**, B. Su, R. Chen, X. Li, H. W. Chen, M. Yang, X., Gou, M. T. Jorgenson, J. Aalto, R. Li, X. Peng, T. Wu, G. D. Clow, G. Wan, X. Wu, D. Luo, 2022: Contrasting characteristics, changes, and linkages of permafrost between the Arctic and the Third Pole. ***Earth-Sciences Review***, 230, 104042, DOI: 10.1016/j.earscirev.2022.104042.
160. Wu, X., H. Liu, H. Hartmann, P. Ciais, J. S. Kimball, C. R. Schwalm, J. J. Camarero, A. Chen, Y. Yang, S. Zhang, X. Li, C. Xu, W. Zhang, Z. Li, **D. Chen**, 2022: Timing and order of extreme drought and wetness determine bioclimatic sensitivity of tree growth. ***Earth's Future***, 10(7): e2021EF002530. DOI: 10.1029/2021EF002530.
161. Xiong, J., S., Guo, **D. Chen**, Y. Zhong, B. Liu, Abhishek, J. Yin, 2022: Past and future terrestrial water storage changes in the lower Mekong River basin: The influences of climatic and non-climatic factors. ***Journal of Hydrology***, 612, 128275, DOI: 10.1016/j.jhydrol.2022.128275.
162. Xu, X., C. Sun, **D. Chen**, T. Zhao, J. Xu, S. Zhang, J. Li, B. Chen, Y. Zhao, L. Dong, X. Sun, Y. Zhu, 2022: A vertical transport window of water vapor in the troposphere over the Tibetan Plateau with implication for global climate change. ***Atmospheric Chemistry and Physics***, 22, 1149–1157. DOI: 10.5194/acp-22-1149-2022.
163. Yang, J., S. Kang, **D. Chen**, Z. Lin, Z. Ji, K. Duan, H. Deng, L. Tripathee, W. Du, M. Rai, F. Yan, Y. Li, R. R. Gillies, 2022: South Asian black carbon is threatening the water sustainability of the Asian Water Tower. ***Nature Communications***, 13:7360. DOI: 10.1038/s41467-022-35128-1**.**
164. Yao, T., T. Bolch, **D. Chen,** J. Gao, W. Immerzeel, S. Piao, F. Su, L. Thompson, Y. Wada, L. Wang, T. Wang, G. Wu, B. Xu, W. Yang, G. Zhang, P. Zhao, 2022: The imbalance of the Asian Water Tower. ***Nature Reviews Earth & Environment***, 3(10): 618-632. DOI: 10.1038/s43017-022-00299-4.
165. Yao, T., L. Thompson, **D. Chen,** S. Piao, 2022: Reflections and future strategies for the Third Pole Environment. ***Nature Reviews Earth & Environment***, 3, 608–610. DOI: 10.1038/s43017-022-00342-4.
166. Ye, K., G. Messori **D. Chen**, T. Woollings, 2022: An NAO-dominated mode of atmospheric circulation drives large decadal changes in wintertime surface climate and snow mass over Eurasia. ***Environmental Research Letters***, 17(4): 044025. DOI: 10.1088/1748-9326/ac592f.
167. Ye, T., W. Liu, S. Chen, **D. Chen**, P. Shi, A. Wang, Y. Li, 2022: Reducing livestock snow disaster risk in the Qinghai–Tibetan Plateau due to warming and socioeconomic development. ***Science of the Total Environment***, 813 (151869), DOI: 10.1016/j.scitotenv.2021.151869.
168. You, Q., Z. Jiang, X. Yue, W. Guo, Y. Liu, J. Cao, W. Li, F. Wu, Z. Cai, H. Zhu, T. Li, Z. Liu, J. He, **D. Chen**, N. Pepin, P. Zhai, 2022: Recent frontiers of climate changes in East Asia at global warming of 1.5°C and 2°C. ***npj Climate and Atmospheric Science***, 5:80, DOI: 10.1038/s41612-022-00303-0.
169. Zha, J.-L., C. Shen, J. Wu, D.-M. Zhao, W.-X. Fan, H.-P. Jiang, C. Azorin-Molina, **D. Chen**, 2022: Effects of Northern Hemisphere Annular Mode on terrestrial near-surface wind speed over eastern China from 1979 to 2017, ***Advances in Climate Change Research***, 13(6): 875-883. DOI: 10.1016/j.accre.2022.10.005.
170. Zhang, G., C. Azorin-Molina, X. Wang, **D. Chen**, T. R. McVicar, J. A. Guijarro, A. Chappell, K. Deng, L. Minola, F. Kong, S. Wang, P. Shi, 2022: Rapid urbanization induced daily maximum wind speed decline in metropolitan areas: A case study in the Yangtze River Delta (China). ***Urban Climate***, 43, 101147, DOI: 10.1016/j.uclim.2022.101147.
171. Zhang, H., W.W. Immerzeel, F. Zhang, R. J. de Kok, **D. Chen**, W. Yan, 2022: Snow cover persistence reverses the altitudinal patterns of warming above and below 5000m on the Tibetan Plateau. ***Science of the Total Environment***, 803, 149889, DOI: 10.1016/j.scitotenv.2021.149889.
172. Zhou, C., C. Azorin-Molina, E. Engström, L. Minola, L. Wern, S. Hellström, J. Lönn, **D. Chen**, 2022: HomogWS-se: A century-long homogenized dataset of near-surface wind speed observations since 1925 rescued in Sweden. ***Earth System Science Data***, 14, 2167–2177, DOI: 10.5194/essd-14-2167-2022.
173. Zhou, F., Z. Zhao, C. Azorin-Molina, X. Jia, G. Zhang, **D. Chen**, J. Liu, J. A. Guijarro, F. Zhang, K. Fang, 2022: Teleconnections between large-scale oceanic-atmospheric patterns and interannual surface wind speed variability across China: Regional and seasonal patterns. ***Science of the Total Environment***, 838, 156023, DOI: 10.1016/j.scitotenv.2022.156023.
174. Zhou, T., W. Zhang, D. Chen, et al. 2022: Understanding and building upon pioneering work of Nobel Prize in Physics 2021 laureates Syukuro Manabe and Klaus Hasselmann: From greenhouse effect to

Earth system science and beyond. ***Sci. China Earth Sci.***, 65(4): 589-600. DOI: 10.1007/s11430-022-9906-4.

175. Zou, J., A. D. Ziegler, **D. Chen**, C. Philippe, X. Jiang, J. Wu, Z. Lin, X. He, J. Wu, Z. Zhang, S. J. Ramchunder, A. Chen, Z. Zeng, 2022: Rewetting global wetlands effectively reduces major greenhouse gas emissions. ***Nature Geoscience***, 15(8): 627-632. DOI: 10.1038/s41561-022-00989-0.
176. Azorin-Molina, C., T. R. McVicar, J. A. Guijarro, B. Trewin, A. J. Frost, G. Zhang, L. Minola, S.-W. Son, K. Deng, **D. Chen**, 2021: A decline of observed daily peak wind gusts with distinct seasonality in Australia, 1941-2016. ***Journal of Climate***, 34(8), 3103–3127. DOI: 10.1175/JCLI-D-20-0590.1.
177. Barthel, R., M. Stangefelt, M. Giese, M. Nygren, K. Seftigen, **D. Chen**, 2021: Current understanding of groundwater recharge and groundwater drought in Sweden compared to countries with similar geology and climate. ***Geografiska Annaler, Series A, Physical Geography***, 103 (4), 323-345, DOI: 10.1080/04353676.2021.1969130.
178. Cai, Z.， Q. You, D. Chen, R. Zhang, J. Chen, S. Kang， 2021: Review of changes and impacts of the cryosphere under the background of rapid Arctic warming. ***Journal of Glaciology and Geocryology*** 43(3), 902-916. DOI： 10. 7522/j. issn.1000-0240. 2021. 0058 (In Chinese with English abstract).
179. Cai, Z., Q. You, F. Wu, H. W. Chen, **D. Chen**, J. Cohen, 2021: Arctic warming revealed by multiple CMIP6 models: evaluation of historical simulations and quantification of future projection uncertainties. ***Journal of Climate***, 34(12): 4871-4892. DOI: 10.1175/JCLI-D-20-0791.1.
180. Chen, A., J. Liu, M. Kumu, O. Varis, Q. Tang, G. Mao, J. Wang, **D. Chen**, 2021: Multidecadal variability of the Tonle Sap Lake flood pulse regime. ***Hydrological Processes***, 35(9): e14327. DOI: 10.1002/hyp.14327.
181. **Chen**, **D.**, 2021: Impact of climate change on sensitive marine and extreme terrestrial ecosystems: recent progresses and future challenges. ***Ambio***, 50(6), 1141-1144, DOI: 10.1007/s13280-020-01446-1.
182. **Chen**, **D.** and H.-W. Lai, 2021: Interpretation of the IPCC WGI report in terms of its context, structure, and methods. ***Advances in Climate Change Research.*** 17(6), 636-643. DOI: 10.12006/j.issn.1673-1719.2021.224 (in Chinese with English abstract).
183. **Chen, D.,** Yao, T.-D., 2021: Climate change and its impact on the Third Pole and beyond. ***Advances in Climate Change Research***, 12(3): 297-298. DOI: 10.1016/j.accre.2021.06.003.
184. Chen, H., J. Liu, G. Mao, Z. Wang, Z. Zeng, A. Chen, K. Wang, **D. Chen**, 2021: Intercomparison of ten ISI-MIP models in simulating discharges along the Lancang-Mekong River basin. ***Science of the Total Environment***, 765: 144494, DOI: 10.1016/j.scitotenv.2020.144494.
185. Chen, S., Q. Yao, X. Chen, J. Liu, **D. Chen**, T. Ou, J. Liu, Z. Dong, Z. Zheng, K. Fang, 2021: Tree-ring recorded variations of 10 heavy metal elements over the past 168 years in southeastern China. ***Elementa: Science of the Anthropocene***, 9 (1): 00075. DOI: 10.1525/elementa.2020.20.00075.
186. Chen, Z., H. Liu, C. Xu, X. Wu, B. Liang, J. Cao, **D. Chen**, 2021: Modeling vegetation greenness and its climate sensitivity with deep-learning technology. ***Ecology and Evolution***, 11(12): 7335-7345. DOI: 10.1002/ece3.7564.
187. Cheng, J., Q. You, Y. Zhou, M. Cai, N. Pepin, **D. Chen**, A. AghaKouchak, S. Kang, M. Li, 2021: Increasing cloud water resource in a warming world. ***Environmental Research Letters***, 16 124067. DOI: 10.1088/1748-9326/ac3db0.
188. Cheng, Y., H. Liu, H. Wang, D. Chen, P. Ciais, Y. Luo, X. Wu, Y. Yin, 2021: Indication of paleoecological evidence on the evolution of alpine vegetation productivity and soil erosion in central China since the mid-Holocene. ***Science China Earth Sciences*** 64, DOI: 10.1007/s11430-020-9757-1.
189. Deng, K., C. Azorin-Molina, L. Minola, G. Zhang, **D. Chen**, 2021: Global near-surface wind speed changes over the last decades revealed by global reanalyses and CMIP6 model simulations. ***Journal of Climate***, 34(6): 2219-2234. DOI: 10.1175/JCLI-D-20-0310.1.
190. Fan, C., S. Yin, **D. Chen**, 2021: Spatial correlations of daily precipitation over mainland China. ***International Journal of Climatology***, 41(14): 6350-6365. DOI: 10.1002/joc.7199.
191. Fan, K., Q. Zhang, J. Li, **D. Chen**, C.-Y. Xu, 2021: The scenario-based variations and causes of future surface soil moisture across China in the twenty-first century. ***Environmental Research Letters***, 16 034061, DOI: 10.1088/1748-9326/abde5e.

192. Fan, L.-J., Z.-W. Yan, **D. Chen**, Z. Li, 2021: Assessment of Central Asian heat extremes by statistical downscaling: validation and future projection for 2015–2100. ***Advances in Climate Change Research***, 13(1): 14-27. DOI: 10.1016/j.accre.2021.09.007.
193. Fang, K., P. Zhang, J. Chen, **D. Chen**, 2021: Co-varying temperatures at 200hpa over the Earth's three poles. ***Science China Earth Sciences***, 64(2), 340-350, DOI: 10.1007/s11430-020-9680-y.
194. Fang, W., C. Yi, **D. Chen**, P. Xu, G. Hendrey, N. Krakauer, K. Jensen, S. Gao, Z. Lin, G. Lam, Q. Zhang, T. Zhou, 2021: Hotter and drier climate made the Mediterranean Europe and northern Africa region a shrubbier landscape. ***Oecologia***, 197: 1111-1126. DOI: 10.1007/s00442-021-05041-3.
195. Gao, K., A. Duan, **D. Chen**, 2021: Inter-decadal summer warming of the Tibetan Plateau mainly regulated by sea surface temperature anomaly in the Labrador Sea. ***International Journal of Climatology***, 41 (Suppl. 1): E2633-E2643. DOI:10.1002/joc.6871.
196. Guo, L., T. Li, **D. Chen**, J. Liu, B. He, Y. Zhang, 2021: Links between global terrestrial water storage and large-scale modes of climatic variability. ***Journal of Hydrology***, 598, 126419, DOI: 10.1016/j.jhydrol.2021.126419.
197. Kukulies, J., **D. Chen**, J. Curio, 2021: The role of mesoscale convective systems in precipitation in the Tibetan Plateau region. ***Journal of Geophysical Research–Atmosphere***, 126, e2021JD035279, DOI: 10.1029/2021JD035279.
198. Lai, H.-W., H. W. Chen, J. Kukulies, T. Ou, **D. Chen**, 2021: Regionalization of seasonal precipitation over the Tibetan Plateau and associated large-scale atmospheric systems. ***Journal of Climate***, 34(7): 2635-2651. DOI: 10.1175/JCLI-D-20-0521.1.
199. Lai, Y., X. Chen, Y. Ma, **D. Chen**, S. Zhaxi, 2021: Impacts of the westerlies on planetary boundary layer growth over a valley on the north side of the central Himalayas. ***Journal of Geophysical Research – Atmospheres***, 126(3): e2020JD033928. DOI: 10.1029/2020JD033928.
200. Liao, W., L. Wu, S. Zhou, X. Wang, **D. Chen**, 2021: Impact of synoptic weather types on ground-level ozone concentrations in Guangzhou, China. ***Asia-Pacific Journal of Atmospheric Sciences***, 57, 169-180, DOI: 10.1007/s13143-020-00186-2.
201. Lin, C., K. Yang, **D. Chen**, N. Guyennon, R. Balestrini, X. Yang, S. Acharya, T. Ou, T. Yao, G. Tartari, F. Salerno, 2021: Summer afternoon precipitation associated with wind convergence near the Himalayan glacier fronts. ***Atmospheric Research***, 259: 105658. DOI: 10.1016/j.atmosres.2021.105658.
202. Liu, Y., C. Zhang, Q. Tang, S.-M. Hosseini-Moghari, G. G. Haile, L. Li, W. Li, K. Yang, R. J. van der Ent, **D. Chen**, 2021: Moisture source variations for summer rainfall in different intensity classes over Huaihe River Valley, China. ***Climate Dynamics***, 57: 1121-1133. DOI: 10.1007/s00382-021-05762-4.
203. Martin, M. A., O. Alcaraz Sendra, A. Bastos, N. Bauer, C. Bertram, T. Blenckner, K. Bowen, P. M. Brando, T. Brodie Rudolph, M. Büchs, M. Bustamante, **D**. **Chen**, H. Cleugh, P. Dasgupta, F. Denton, J. F. Donges, F.K. Donkor, H. Duan, C. M. Duarte, K. L. Ebi, C.M. Edwards, A. Engel, E. Fisher, S. Fuss, J. Gaertner, A. Gettelman, C. A. J. Girardin, N. R. Golledge, J. F. Green, M. R. Grose, M. Hashizume, S. Hebden, H. Hepach, M. Hirota, H. H. Hsu, S. Kojima, S. Lele, S. Lorek, H. K. Lotze, H. D. Matthews, D. McCauley, D. Mebratu, N. Mengis, R. H. Nolan, E. Pihl, S. Rahmstorf, A. Redman, C. E. Reid, J. Rockström, J. Rogelj, M. Saunois, L. Sayer, P. Schlosser, G. B. Sioen, J. H. Spangenberg, D.Stammer, T. N. S. Sterner, N. Stevens, K. Thonicke, H. Tian, R. Winkelmann, J. Woodcock, 2021: Ten new insights in climate science 2021: a horizon scan. ***Global Sustainability***, 4(e25), 1-20. DOI: 10.1017/sus.2021.25
204. Minola, L., C. Azorin-Molina, J. A. Guijarro, G. Zhang, S.-W. Son, **D. Chen**, 2021: Climatology of near-surface daily peak wind gusts across Scandinavia: observations and model simulations. ***Journal of Geophysical Research-Atmosphere***, 126(7): e2020JD033534. DOI: 10.1029/2020JD033534.
205. Nik, V. M., A. T. D. Perera, **D. Chen**, 2021: Towards climate resilient urban energy systems: A review. ***National Science Review***, 8: nwaa134, DOI: 10.1093/nsr/nwaa134.
206. Niu, X., J. Tang, **D. Chen**, S. Wang, T. Ou, C. Fu, 2021: The performance of CORDEX-EA-II simulations in simulating seasonal temperature and elevation-dependent warming over the Tibetan Plateau. ***Climate Dynamics***, 57(3-4): 1135-1153. DOI: 10.1007/s00382-021-05760-6.

207. Niu, X., J. Tang, **D. Chen**, S. Wang, T. Ou, 2021: Elevation-dependent warming over the Tibetan Plateau from an ensemble of CORDEX-EA regional climate simulations. ***Journal of Geophysical Research-Atmospheres***, 126, e2020JD033997. DOI: 10.1029/2020JD033997.
208. Pang, G., X. Wang, **D. Chen**, M. Yang, L. Liu, 2021: Evaluation of a climate simulation over the Yellow River Basin based on a regional climate model (REMO) within the CORDEX. ***Atmospheric Research***, 254 105522. DOI: 10.1016/j.atmosres.2021.105522.
209. Pi, X., L. Feng, W. Li, J. Liu, X. Kuang, K. Shi, Q. Wei, **D. Chen**, J. Tang, 2021: Chlorophyll-a concentrations in 82 large alpine lakes on the Tibetan Plateau during 2003–2017: temporal–spatial variations and influencing factors. ***International Journal of Digital Earth***, 14(6), 714-735. DOI: 10.1080/17538947.2021.1872722.
210. Shen, Z., Q. Zhang, **D. Chen**, V. P. Singh, 2021: Varying effects of mining development on ecological conditions and groundwater storage in dry region in Inner Mongolia of China. ***Journal of Hydrology***, 597. DOI: 10.1016/j.jhydrol.2020.125759.
211. Shen, Z., Q. Zhang, S. Piao, J. Peñuelas, N. C. Stenseth, **D. Chen**, C.-Y. Xu, V. P. Singh, T. Liu, 2021: Mining can exacerbate global degradation of dryland. ***Geophysical Research Letters***. DOI: 10.1029/2021GL094490.
212. Song, Y., J. Tian, H. W. Linderholm, C. Wang, Z. Ou, **D. Chen**, 2021: The contributions of climate change and production area expansion to drought risk for maize in China over the last four decades. ***International Journal of Climatology***. 41 (S1), E2851-E2862, DOI: 10.1002/joc.6885.
213. Sun, H., F. Su, Z. He, T. Ou, **D. Chen**, Z. Li, Y. Li, 2021: Hydrological evaluation of high-resolution precipitation estimates from the WRF model in the Third Pole river basins. ***Journal of Hydrometeorology***, 22, 2055-2077. DOI: 10.1175/JHM-D-20-0272.1.
214. Sun, H., F. Su, T. Yao, Z. He, G. Tang, J. Huang, B. Zheng, F. Meng, T. Ou, **D. Chen**, 2021: General overestimation of ERA5 precipitation in flow simulations for High Mountain Asia basins. ***Environmental Research Communications***, 3, 121003. DOI: 10.1088/2515-7620/ac40f0.
215. Sun, W., B. Wang, Q. Zhang, **D. Chen**, J. Liu, 2021: Middle East climate response to the Saharan vegetation collapse during the mid-Holocene. ***Journal of Climate***, 34(1), 229-242. DOI: 10.1175/JCLI-D-20-0317.1.
216. Sun, Y., X. Zhang, Y. Ding, **D. Chen**, D. Qin, P. Zhai, 2021: Understanding human influence on climate change in China. ***National Science Review***, 9(3): nwab113. DOI: 10.1093/nsr/nwab113.
217. Wang, X., **D. Chen**, G. Pang, S. A. Anwar, T. Ou, M. Yang, 2021: Effects of cumulus parameterization and land-surface hydrology schemes on Tibetan Plateau climate simulation during the wet season: Insights from the RegCM4 model. ***Climate Dynamics***, 57(7-8): 1853-1879. DOI: 10.1007/s00382-021-05781-1.
218. Wang, X., **D. Chen**, G. Pang, X. Gou, M. Yang, 2021: Historical and future climates over the upper and middle reaches of Yellow River Basin revealed by a regional climate model in CORDEX. ***Climate Dynamics***, 56: 2749-2771. DOI: 10.1007/s00382-020-05617-4.
219. Wang, Y., L. Feng, J. Liu, **D. Chen**, 2021: Reply to Comment on 'Changes of inundation area and water turbidity of Tonle Sap Lake: responses to climate changes or upstream dam construction?'. ***Environmental Research Letters***, 16 058002. DOI: 10.1088/1748-9326/abf3db.
220. Xiao, H., Y. Tang, H. Li, L. Zhang, T. Ngo-Duc, **D. Chen**, Q. Tang, 2021: Saltwater intrusion into groundwater systems in the Mekong Delta and links to global change. ***Advances in Climate Change Research***, 12(3): 342-352. DOI: 10.1016/j.accre.2021.04.0.
221. You, Q., Z. Cai, N. Pepin, **D. Chen**, B. Ahrens, Z. Jiang, F. Wu, S. Kang, R. Zhang, T. Wu, P. Wang, M., Li, Z. Zuo, Y. Gao, P. Zhai, Y. Zhang, 2021: Warming amplification over the Arctic Pole and Third Pole: Trends, mechanisms and consequences. ***Earth-Science Reviews***, 217: 103625. DOI: 10.1016/j.earscirev.2021.103625.
222. You, Q., S. Kang, J. Li, **D. Chen**, P. Zhai, Z. Ji, 2021: Several research frontiers of climate change over the Tibetan Plateau. ***Journal of Glaciology and Geocryology***. 43(3), 885-901. DOI：10. 7522/j. issn.1000-0240. 2021. 0029 (In Chinese with English abstract).

223. Yue, S., K. Yang, H. Lu, X. Zhou, **D. Chen**, W. Guo, 2021: Representation of stony surface-atmosphere interactions in WRF reduces cold and wet biases for the southern Tibetan Plateau. ***Journal of Geophysical Research–Atmosphere***, 126 (21), e2021JD035291. DOI: 10.1029/2021JD035291.
224. Yun, H., J. Tang, L. D'Imperio, X. Wang, Y. Qu, L. Liu, Q. Zhuang, W. Zhang, Q. Wu, A. Chen, Q. Zhu, **D. Chen**, B. Elberling, 2021: Warming and increased respiration have transformed an alpine steppe ecosystem on the Tibetan Plateau from a carbon dioxide sink into a source. ***Journal of Geophysical Research: Biogeosciences***, 126, e2021JG006406. DOI: 10.1029/2021JG006406.
225. Yun, X., Q. Tang, J. Li, H. Lu, L. Zhang, **D. Chen**, 2021: Can reservoir regulation mitigate future climate change induced hydrological extremes in Lancang-Mekong River Basin? ***Science of the Total Environment***, 785: 147322. DOI: 10.1016/j.scitotenv.2021.147322.
226. Zeng, Z., D. Wang, L. Yang, J. Wu, A. D. Ziegler, M. Liu, P. Ciais, T. D. Searchinger, Z.-L. Yang, **D. Chen**, A. Chen, L. Z. X. Li, S. Piao, D. Taylor, X. Cai, M. Pan, L. Peng, P. Lin, D. Gower, Y. Feng, C. Zheng, K. Guan, X. Lian, T. Wang, L. Wang, S.-J. Jeong, Z. Wei, J. Sheffield, K. Caylor, E. F. Wood, 2021: Deforestation-induced warming over tropical mountain regions regulated by elevation. ***Nature Geoscience***, 14, 23-29. DOI: 10.1038/s41561-020-00666-0.
227. Zhang, G., C. Azorin-Molina, **D. Chen**, T. R. McVicar, J. A. Guijarro, F. Kong, L. Minola, K. Deng, P. Shi, 2021: Uneven warming likely contributed to declining near-surface wind speeds in northern China between 1961 and 2016. ***Journal of Geophysical Research –Atmospheres***, 126(11): e2020JD033637. DOI: 10.1029/2020JD033637.
228. Zhao, Y. **D. Chen**, Y. Deng, S.-W. Son, X. Wang, D. Di, M. Pan, X. Ma, 2021: How were the eastward-moving heavy rainfall events from the Tibetan Plateau to the lower reaches of the Yangtze River enhanced? ***Journal of Climate***, 34 (2), 607-620. DOI: 10.1175/JCLI-D-20-0226.1.
229. Zhou, C., A Dai, J. Wang, **D. Chen,** 2021: Quantifying human-induced dynamic and thermodynamic contributions to severe cold outbreaks like November 2019 in the eastern United States, ***Bulletin of the American Meteorological Society***, 102(1): 17-23. DOI: 10.1175/BAMS-D-20-0171.1.
230. Zhou, Q., **D. Chen**, Z. Hu, X. Chen, 2021: Decompositions of Taylor diagram and DISO performance criteria. ***International Journal of Climatology***, 41(12): 5726-5732. DOI: 10.1002/joc.7149.
231. Zhou, T., W. Zhang, **D. Chen**, X. Zhang, Z. Li, Y. Zuo. X. Chen, 2021: Interpretation of the 2021 Nobel Prize in physics: from the greenhouse effect to the Earth system science. ***SCIENCE CHINA Earth Sciences***. DOI: 10.1360/SSTe-2021-0338.
232. Zhou, X., K. Yang, L. Ouyang, Y. Wang, Y. Jiang, X. Li, D. Chen, A. Prein, 2021: Added value of kilometer-scale modeling over the third pole region: a CORDEX-CPTP pilot study. ***Climate Dynamics***, 57, 1673–1687. DOI: 10.1007/s00382-021-05653-8.
233. Aryal, D., L. Wang, T. R. Adhikari, J. Zhou, X. Li, M. Shrestha, Y. Wang, **D. Chen**, 2020: A model-based flood hazard mapping on the southern slope of Himalaya. ***Water***, 12, 540. DOI:10.3390/w12020540.
234. Chai, J., F. Liu, C. Xing, B. Wang, C. Gao, J. Liu, **D. Chen**, 2020: A robust equatorial Pacific westerly response to tropical volcanism in multiple models. ***Climate Dynamics***, 55: 3413-3429. DOI: 10.1007/s00382-020-05453-6**.**
235. Chen, A., K. A. Emanuel, **D. Chen**, C. Lin, F. Zhang, 2020: Rising future tropical cyclone-induced extreme winds in the Mekong River Basin. ***Science Bulletin***, 65, 419-424. DOI: 10.1016/j.scib.2019.11.022.
236. Chen, A., M. Giese, **D. Chen**., 2020: Flood impact on Mainland Southeast Asia between 1985 and 2018 -- the role of tropical cyclones. ***Journal of Flood Risk Management***, 13(2): e12598. DOI:10.1111/jfr3.12598.
237. **Chen, D.**, H. Rodhe, K. Emanuel, S. I. Seneviratne, P. Zhai, B. Allard, P. Berg, S. Björck, I. A. Brown, L. Bärring, L. Chafik, K. Deng, M.-J. Gaillard-Lemdahl, M. Hieronymus, E. Kjellström, H. W. Linderholm, W. May, J.-O. Näslund, T. Ou, A. Rutgersson, E. Sahlee, F. Schenk, J. Sjolte, M. K. Sporre, A. Stigebrandt, G. A. Weyhenmeyer, P. Zhang, Q. Zhang, 2020: Summary of a workshop on Extreme Weather Events in a Warming World organized by the Royal Swedish Academy of Sciences. ***Tellus B: Chemical and Physical Meteorology,*** 72(1): 1-13. DOI: 10.1080/16000889.2020.1794236.
238. **Chen, D.**, P. Zhang, K. Seftigen, T. Ou, M. Giese, R. Barthel, 2020: Hydroclimate changes over

Sweden in the 20th and 21st centuries: a millennium perspective. ***Geografiska Annaler: Series A, Physical Geography***, 103(2), 103-131, DOI: 10.1080/04353676.2020.1841410.

239. Corell, D., M. J. Estrela, J. A. Valiente, C. Azorin-Molina, **D. Chen**, 2020: Influences of synoptic situation and teleconnections on fog-water collection in the Mediterranean Iberian Peninsula, 2003-2012. ***International Journal of Climatology***, 40, 3297-3317. DOI:10.1002/joc.6398.
240. Dai, Y., **D. Chen**, T. Yao, L. Wang, 2020: Large lakes over the Tibetan Plateau may boost snow downwind: implications for snow disaster. ***Science Bulletin***, 65(20): 1713-1717. DOI: 10.1016/j.scib.2020.06.012.
241. Deng, K., X. Jiang, C. Hu, **D. Chen**, 2020: More frequent summer heat waves in southwestern China linked to the recent declining of Arctic sea ice. ***Environmental Research Letters***, 15 074011**,** DOI: 10.1088/1748-9326/ab8335.
242. Du, W., S. Kang; X. Qin, Z. Ji, W. Sun, J. Chen, J. Yang, **D. Chen**, 2020: Can summer monsoon moisture invade the Jade Pass in Northwestern China? ***Climate Dynamics***, 55: 3101-3115. DOI: 10.1007/s00382-020-05423-y.
243. Gu, X., Q. Zhang, J. Li, **D. Chen**, V. P. Singh, Y. Zhang, J. Liu, Z. Shen, H. Yu, 2020: Impacts of anthropogenic warming and uneven regional socio-economic development on global river flood risk. ***Journal of Hydrology***, 590 125262, DOI: 10.1016/j.jhydrol.2020.125262.
244. Guo, L, Z. Jiang, **D. Chen**, H. L. Treut, L. Li, 2020: Projected precipitation changes over China for global warming levels at 1.5 ℃ and 2 ℃ in an ensemble of regional climate simulations: impact of bias correction methods. ***Climatic Change***, 162: 623-643. DOI: 10.1007/s10584-020-02841-z.
245. Irannezhad, M., J. Liu, B. Ahmadi, **D. Chen**, 2020: The dangers of Arctic zombie wildfires. ***Science***, Vol. 369, Issue 6508, pp. 1171. DOI: 10.1126/science.abe1739.
246. Irannezhad, M., J. Liu, **D. Chen**, 2020: Influential climate teleconnections for spatiotemporal precipitation variability in the Lancang-Mekong river basin from 1952 to 2015. ***Journal of Geophysical Research – Atmospheres***, 125(21): e2020JD033331. DOI:10.1029/2020JD033331.
247. Jiang, H., Y. Yi, W. Zhang, K. Yang, **D. Chen**, 2020: Sensitivity of soil freeze/thaw dynamics to environmental conditions at different spatial scales in the central Tibetan Plateau. ***Science of the Total Environment***, 734, 139261, DOI: 10.1016/j.scitotenv.2020.139261.
248. Jiang, H., G. Zheng, Y. Yi, **D. Chen**, W. Zhang, K. Yang, C. E. Miller, 2020: Progress and challenges in studying regional permafrost monitoring in the Tibetan Plateau using satellite remote sensing and models. ***Frontiers in Earth Science***, 8:560403, DOI: 10.3389/feart.2020.560403.
249. Kang, J. M., J. Lee, S.-W. Son, J. Kim, **D. Chen**, 2020: The rapid intensification of East Asian cyclones around the Korean Peninsula and their surface impacts. ***Journal of Geophysical Research: Atmospheres***, 125(2): e2019JD031632. DOI: 10.1029/2019JD031632.
250. Kebede, M., L. Wang, K. Yang, **D. Chen**, X. Li, T. Zeng, Z. Hu, 2020: Discharge estimates for ungauged rivers flowing over complex high-mountainous regions based solely on remote sensing-derived datasets. ***Remote Sensing***, 12, 1064; DOI:10.3390/rs12071064.
251. Kukulies, J., **D. Chen**, H. Wang, 2020: Temporal and spatial variations of convection, clouds and precipitation over the Tibetan Plateau from recent satellite observations. Part II: Precipitation climatology derived from GPM. ***International Journal of Climatology***, 40(11): 4858-4875. DOI:10.1002/joc.6493.
252. Lai, H.-W., F. Zhang, E. E. Clothiaux, D. R. Stauffer, B. J. Gaudet, J. Verlinde, **D. Chen**, 2020: Modeling Arctic boundary layer cloud streets at grey-zone resolutions. ***Advances in Atmospheric Sciences***, 37, 42–56. Doi: 10.1007/s00376-019-9105-y.
253. Lee, J., S.-W. Son, H.-O. Cho, J. Kim, D.-H. Cha, J. R. Gyakumd, **D. Chen**, 2020: Extratropical cyclones over East Asia: Climatology, seasonal cycle, and long-term trend. ***Climate Dynamics***, 54, 1131–1144, DOI:10.1007/s00382-019-05048-w.
254. Liao, C., J. Qiu, B. Chen, **D. Chen**, B. Fu, M. Georgescu, C. He, G. D. Jenerette, X. Li, X. Li, X. Li, B. Qiuying, P. Shi, J. Wu, 2020: Advancing landscape sustainability science: theoretical foundation and synergies with innovations in methodology, design, and application. ***Landscape Ecology***, 35: 1-9. DOI: 10.1007/s10980-020-00967-0.

255. Liu, B., B. Wang, J. Liu, **D. Chen**, L. Ning, M. Yan, W. Sun, K. Chen, 2020: Global and polar region temperature change induced by single mega volcanic eruption based on CESM simulation. ***Geophysical Research Letters***, 47(18): e2020GL089416. DOI: 10.1029/2020GL089416.
256. Liu, F., C. Xing, J. Li, B. Wang, J. Chai, C. Gao, G. Huang, J. Liu, **D. Chen**, 2020: Could the recent Taal Volcano eruption trigger an El Niño and lead to Eurasian warming? ***Advances in Atmospheric Sciences***, 37(7), 663-670. DOI: 10.1007/s00376-020-2041-z.
257. Liu, F., C. Xing, J. Li, B. Wang, J. Chai, C. Gao, G. Huang, J. Liu, **D. Chen**, 2020: Erratum to: Could the Recent Taal Volcano Eruption Trigger an El Niño and Lead to Eurasian Warming? ***Advances in Atmospheric Sciences***, 37, 1295. DOI: 10.1007/s00376-020-2013-3
258. Liu, X., B. He, L. Guo, L. Huang, **D. Chen**, 2020: Similarities and differences in the mechanisms causing the European summer heatwaves in 2003, 2010, and 2018. ***Earth's Future***, 8, e2019EF001386. DOI: 10.1029/2019EF001386.
259. Luo, Z., J. Yang, M. Gao, **D. Chen**, 2020: Extreme hot days over three global mega-regions: historical fidelity and future projection. ***Atmospheric Science Letters***, 21:e1003. DOI: 10.1002/asl.1003.
260. Minola, L., F. Zhang, C. Azorin-Molina, A. A. Safaei Pirooz, R. G. J. Flay, H. Hersbach, **D. Chen**, 2020: Near-surface mean and gust wind speeds in ERA5 across Sweden: towards an improved gust parametrization. ***Climate Dynamics***, 55(3-4): 887-907. DOI: 10.1007/s00382-020-05302-6.
261. Niu, X., J. Tang, S. Wang, C. Fu, **D. Chen**, 2020: On the sensitivity of seasonal and diurnal precipitation to cumulus parameterization over CORDEX-EA-II. ***Climate Dynamics***, 54, 373-392, DOI:10.1007/s00382-019-05010-w.
262. Ou, T., **D. Chen**, X. Chen, C. Lin, K. Yang, H.-W. Lai, F. Zhang, 2020: Simulation of summer precipitation diurnal cycles over the Tibetan Plateau at the gray-zone grid spacing for cumulus parameterization. ***Climate Dynamics***, 54: 3525-3539. DOI: 10.1007/s00382-020-05181-x.
263. Pei, L., Z. Yan, **D. Chen**, S. Miao, 2020: Climate variability or anthropogenic emissions: which caused Beijing Haze?". ***Environmental Research Letters 15,*** 034004**.** DOI:10.1088/1748-9326/ab6f11.
264. Perera, A. T. D., V. M. Nik, **D. Chen**, J.-L. Scartezzini, T. Hong, 2020: Quantifying the impacts of climate change and extreme climate events on energy systems. ***Nature Energy*** 5, 150-159, DOI: 10.1038/s41560-020-0558-0.
265. Pirooz, A. A. S., R. G. J. Flay, L. Minola, C. Azorin-Molina, **D. Chen**, 2020: Effects of sensor response and moving average filter duration on maximum wind gust measurements. ***Journal of Wind Engineering & Industrial Aerodynamics***, 206: 104354. DOI: 10.1016/j.jweia.2020.104354.
266. Qi, W., J. Liu, J. Xia, **D. Chen**, 2020: Divergent sensitivity of surface water and energy variables to precipitation product uncertainty in the Tibetan Plateau. ***Journal of Hydrology***, 581: 124338. DOI:10.1016/j.jhydrol.2019.124338.
267. Ren, F., C. Ding, D.-L. Zhang, **D. Chen**, H. Ren, W. Qiu, 2020: A dynamical-statistical-analog ensemble forecast model: theory and an application to heavy rainfall forecasts of landfalling tropical cyclones. ***Monthly Weather Review***, 148(4): 1503-1517. DOI: 10.1175/MWR-D-19-0174.1.
268. Sang, Y., **D. Chen** T. Gong, 2020: What caused the decline of water level of Yamzho Yumco during 1975-2012 in the Southern Tibetan Plateau? ***Journal of Geophysical Research: Atmospheres***, 125(6): e2019JD031121. DOI: 10.1029/2019JD031121.
269. Sun, H., F. Su, J. Huang, T. Yao, **D. Chen**, Y. Lu, 2020: Contrasting precipitation gradient characteristics between westerlies and monsoon dominated upstream river basins in the Third Pole. ***Chinese Science Bulletin.*** DOI: 10.1360/TB-2019-0491 (in Chinese with English abstract).
270. Sun, W., B. Wang, **D. Chen**, C. Gao, G. Lu, J. Liu, 2020: Global monsoon responses to tropical and Arctic stratospheric aerosol injection. ***Climate Dynamics***, 55: 2107-2121. DOI: 10.1007/s00382-020-05371-7.
271. Tang, Q., Y. Liu, C. Zhang, F. Zhang, Y. Li, Y. Gao, W. Li, and **D. Chen**, 2020: Research progress on moisture source of precipitation over the Tibetan Plateau and its surrounding areas. ***Transactions of Atmospheric Sciences***. 43(6), 1002-1009. DOI: 10.13878/j.cnki.dqkxxb.20201003001. (In Chinese with English abstract).

272. Wang, X., **D. Chen**, G. Pang, T. Ou, M. Yang, M. Wang, 2020: A climatology of surface–air temperature difference over the Tibetan Plateau: Results from multi-source reanalyses. ***International Journal of Climatology***, 40(14): 6080-6094. DOI:10.1002/joc.6568.
273. Wang, Y., K. Yang, X. Zhou, **D. Chen**, H. Lu, L. Ouyang, Y. Chen, L. Zhu, B. Wang, 2020: Synergy of orographic drag parameterization and high resolution greatly reduces biases of WRF-simulated precipitation in central Himalaya. ***Climate Dynamics***, 54: 1729-1740. DOI: 10.1007/s00382-019-05080-w.
274. Wang, Y., Feng, L., J. Liu, X. Hou, **D. Chen**, 2020: Changes of inundation area and water turbidity of Tonle Sap Lake: responses to climate changes or upstream dam construction? ***Environmental Research Letters***, 15(9): 0940a1. DOI: 10.1088/1748-9326/abac79.
275. Xing, C., F. Liu, B. Wang, **D. Chen**, J. Liu, B. Liu, 2020: Boreal-winter surface air temperature responses to large tropical volcanic eruptions in CMIP5 models. ***Journal of Climate***, 33(6): 2407-2426. DOI:10.1175/JCLI-D-19-0186.1.
276. Yang, J. H., S. Kang, Z. Ji, X. Chen, S. Yang, S.-Y. Lee， B. de Foy, **D. Chen,** 2020: A hybrid method for PM2.5 source apportionment through WRF-Chem simulations and an assessment of emission-reduction measures in western China. ***Atmospheric Research***, 236, 104787, DOI:10.1016/j.atmosres.2019.104787.
277. Yin, S., **D. Chen,** 2020: Weather generators. ***In Oxford Research Encyclopedia of Climate Science. Oxford University Press.*** DOI: 10.1093/acrefore/9780190228620.013.768.
278. Yin, Y., L. Wang, Z. Wang, Q. Tang, S. Piao, **D. Chen**, J. Xia, T. Conradt, J. Liu, Y., Wada, X. Cai, Z. Xie, Q. Duan, X. Li, J. Zhou, and J. Zhang, 2020: Quantifying water scarcity in northern China within the context of climatic and societal changes and south-to-north water diversion. ***Earth's Future***, 8(8): e2020EF001492. DOI: 10.1029/2020EF001492.
279. You, Q., **D. Chen**, F. Wu, N. Pepin, Z. Cai, B. Ahrens, Z. Jiang, Z. Wu, S. Kang, A. AghaKouchak, 2020: Elevation dependent warming over the Tibetan Plateau: patterns, mechanisms and perspectives. ***Earth-Science Reviews***, 210: 103349. DOI: 10.1016/j.earscirev.2020.103349.
280. Yun, X., Q., Tang, J. Wang, X. Liu, Y. Zhang, H. Lu, Y. Wang, L. Zhang, **D. Chen**, 2020: Impacts of climate change and reservoir operation on streamflow and flood characteristics in the Lancang-Mekong river basin. ***Journal of Hydrology***, 590: 125472. DOI: 10.1016/j.jhydrol.2020.125472.
281. Zeng, C., F. Zhang, L. Wang and **D. Chen**, 2020: Summer precipitation characteristics on the southern Tibetan Plateau. ***International Journal of Climatology***, 41: E3160-E3177. DOI:10.1002/joc.6914.
282. Zhang, G., C. Azorin-Molina, **D. Chen**, J. A. Guijarro, F. Kong, L. Minola, T. R. McVicar, S.-W. Son, P. Shi, 2020: Variability of daily maximum wind speed across China, 1975-2016: An examination of likely causes. ***Journal of Climate***, 33(7): 2793-2816. DOI: 10.1175/JCLI-D-19-0603.1.
283. Zhang, P., J.-H. Jeong, J.-H. Yoon, H. Kim, S.-Y. S. Wang, H. W. Linderholm, K. Fang, X. Wu, **D. Chen**, 2020: Abrupt shift to hotter and drier climate over inner East Asia beyond the tipping point. ***Science***. Vol. 370, Issue 6520, pp. 1095-1099, DOI: 10.1126/science.abb3368.
284. Zhao, Y., **D. Chen**, J. Li, D. Chen, Y. Chang, J. Li, R. Qin, 2020: Enhancement of the summer extreme precipitation over North China by interactions between moisture convergence and topographic settings. ***Climate Dynamics***, 54: 2713-2730. DOI: 10.1007/s00382-020-05139-z.
285. Zheng, G., Y. Yang, D. Yang, B. Dafflon, Y. Yi, S. Zhang, **D. Chen**, B. Gao, T. Wang, R. Shi, Q. Wu, 2020: Remote sensing spatiotemporal patterns of frozen soil and the environmental controls over the Tibetan Plateau during 2002–2016. ***Remote Sensing of Environment***, 247, 111927, DOI: 10.1016/j.rse.2020.111927.
286. Zheng, X. Y. Lu, J. Yuan, B. Yvette, S. Zhang, N. Chr. Stenseth, D. O. Hessen, H. Tian, M. Obersteiner, **D. Chen**, 2020: Drivers of change in China's energy-related CO2 emissions. ***Proceedings of the National Academy of Sciences of the United States of America***, 117(1): 29-36. DOI:10.1073/pnas.1908513117.
287. Zhou, C., **D. Chen**, K. Wang, A. Dai, D. Qi, 2020: Conditional attribution of the 2018 summer extreme heat over northeast China: Roles of urbanization, global warming and warming-induced circulation changes. ***Bulletin of the American Meteorological Society***, 101(1): S71-S76. DOI:10.1175/BAMS-D-19-0197.1.

288. Zhu, X., Z. Wei, W. Dong, Z. Ji, X. Wen, Z. Zheng, D. Yan, **D. Chen**, 2020: Dynamical downscaling simulation and projection for mean and extreme temperature and precipitation over Central Asia. ***Climate Dynamic***s, 54: 3279-3306. DOI: 10.1007/s00382-020-05170-0.
289. Zhu, Y., Y.-F. Sang, **D. Chen**, S. Bellie, D. Li, 2020: Effects of the South Asian summer monsoon anomaly on interannual variations in precipitation over the South-Central Tibetan Plateau. ***Environmental Research Letters***, 15(12): 124067. DOI: 10.1088/1748-9326/abc71b.
290. Azorin-Molina, C., J. A. Guijarro, T. R. McVicar, B. Trewin, A. J. Frost, **D. Chen**, 2019: An approach to homogenize daily peak wind gusts: an application to the Australian series. ***International Journal of Climatology***, 39(4), 2260-2277. DOI: 10.1002/joc.5949.
291. Bibi, S., L. Wang, X. Li, X. Zhang, **D. Chen**, 2019: Response of groundwater storage and recharge in the Qaidam Basin (Tibetan Plateau) to climate variations from 2002 to 2016. ***Journal of Geophysical Research: Atmospheres***, 124, 9918–9934. DOI: 10.1029/2019JD030411.
292. Chen, A., C.-H. Ho, **D. Chen**, C. Azorin-Molina, 2019: Tropical cyclone rainfall in the Mekong River Basin for 1983 - 2016. ***Atmospheric Research***, 226, 66-75. DOI:10.1016/j.atmosres.2019.04.012
293. **Chen, D**., D. Qin, C. Xiao, B. Su, 2019: Climate resilience and its implications for China. ***Advances in Climate Change Research*** 15 (2). DOI: 10.12006/j.issn.1673-1719.2018.144 (in Chinese with English abstract).
294. Estrela, M., D. Corell, J. A. Valiente, C. Azorin-Molina, **D. Chen**, 2019: Spatio-temporal variability of fog-water collection in the eastern Iberian Peninsula: 2003-2012. ***Atmospheric Research***, 226, 87-101. DOI: 10.1016/j.atmosres.2019.04.016.
295. Fang, K., **D. Chen**, Z. Guo, Y. Zhao, D. Frank, M. He, F. Zhou, F. Shi, H. Seppä, P. Zhang, R. Neukom**,** 2019: An interdecadal climate dipole between Northeast Asia and Antarctica over the past five centuries. ***Climate Dynamics***, 52, 765-775. DOI:10.1007/s00382-018-4161-z**.**
296. Fang, K., **D. Chen**, L. Ilvonen, L. Pasanen, L. Holmström, H. Seppa, G. Huang, T. Ou, H. Linderholm, 2019: Oceanic and atmospheric modes in the Pacific and Atlantic Oceans since the Little Ice Age (LIA): towards a synthesis. ***Quaternary Science Reviews***, ***215***, 293-307, DOI:10.1016/j.quascirev.2019.05.014.
297. Fang, K., Z. Guo, **D. Chen**, L. Wang, Z. Dong, F. Zhou, Y. Zhao, J. Li, Y. Li, X. Cao, 2019: Interdecadal modulation of the Atlantic Multi-decadal Oscillation (AMO) on southwest China's temperature over the past 250 years. ***Climate Dynamics***, 52, 2055–2065, DOI:10.1007/s00382-018-4244-x.
298. Gao, K., A. Guan, **D. Chen**, G. Wu, 2019: Surface energy budget diagnosis reveals possible mechanism for the different warming rate among Earth's three poles in recent decades. ***Science Bulletin***, 64(16): 1140-1143. DOI: 10.1016/j.scib.2019.06.023.
299. Gou, J., F. Wang, K. Jin, **D. Chen**, 2019: More realistic land-use and vegetation parameters in a regional climate model reduce model biases over China. ***International Journal of Climatology***, 39(12): 4825-4837. DOI: 10.1002/joc.6110.
300. He, J., F. Zhang, X. Chen, X. Bao, **D. Chen**, H.-M. Kim, H.-W. Lai, L. R. Leung, X. Ma, Z. Meng, T. Ou, Z. Xiao, E.-G. Yang, K. Yang, and L. Zhu, 2019: Development and Evaluation of an Ensemble-based Data Assimilation System for Regional Reanalysis over the Tibetan Plateau and Surrounding Regions. ***Journal of Advances in Modeling Earth Systems***, 11, 2503–2522. DOI:10.1029/2019MS001665.
301. Hu, Z., X. Chen, **D. Chen**, J. Li, Q. Zhou, G. Yin, 2019: "Dry gets drier, wet gets wetter": a case study over the arid regions of Central Asia, ***International Journal of Climatology***, 39: 1072-1091, DOI: 10.1002/joc.5863.
302. Hu, Z., X. Chen, Q. Ming, **D. Chen**, J. Li, 2019: DISO: A rethink of Taylor diagram. ***International Journal of Climatology***, 39(5): 2825-2832. DOI: 10.1002/joc.5972.
303. Hu, Z., Q. Zhou, X. Chen, **D. Chen**, J. Li, M. Guo, G. Yin, Z. Duan, 2019: Groundwater Depletion Estimated from GRACE: A Challenge of Sustainable Development in An Arid Region of Central Asia. ***Remote Sensing***, 11(16), 1908; DOI:10.3390/rs11161908.
304. Huang, J., T. Ou, **D. Chen**, Y. Luo, Z. Zhao, 2019: The amplified Arctic warming in the recent decades may have been overestimated by CMIP5 models. ***Geophysical Research Letters***, 46, 13,338–13,345. DOI: 10.1029/2019GL084385

305. Jin, K., F. Wang, **D. Chen**, H. Liu, W. Ding, S. Shi, 2019: A new global gridded anthropogenic heat flux dataset with high spatial resolution and long-term time series. ***Nature Scientific Data***, 6:139, DOI:10.1038/s41597-019-0143-1.
306. Jung, M.-I., S.-W. Son, H. C. Kim, S.-W. Kim, R. J. Park, **D. Chen**, 2019: Contrasting synoptic weather patterns between non-dust high particulate matter events and Asian dust events in Seoul, South Korea. ***Atmospheric Environment***, 214: 116864. DOI:10.1016/j.atmosenv.2019.116864.
307. Kang, S., Q. Zhang, Y. Qian, Z. Ji, C. Li, Z. Cong, Y. Zhang, J. Guo, W. Du, J. Huang, Q. You, A. K. Panday, M. Rupakheti, **D. Chen**, Ö. Gustafsson, M. H. Thiemens, D. Qin, 2019: Linking Atmospheric Pollution to Cryospheric Change in the Third Pole Region: Current Progresses and Future Prospects, ***National Science Review***, 6, 796-809. DOI:10.1093/nsr/nwz031.
308. Kim, G.-U., K.-H., Seo, **D. Chen**, 2019: Climate change over the Mediterranean and current destruction of marine ecosystem. ***Scientific Reports***, 9:18813. DOI:10.1038/s41598-019-55303-7.
309. Kukulies, J., **D. Chen**, H. Wang, 2019: Temporal and spatial variations of convection and precipitation over the Tibetan Plateau based on recent satellite observations. Part I: Cloud climatology derived from CloudSat and CALIPSO. ***International Journal of Climatology***, 39:5396–5412**.** DOI:10.1002/joc.6162.
310. Li, Y., F. Su, **D. Chen**, Q. Tang, 2019: Atmospheric water transport to the endorheic Tibetan Plateau and its effect on the hydrological status in the region. ***Journal of Geophysical Research-Atmosphere***, 124, 12,864–12,881, DOI:10.1029/2019JD031297.
311. Li, Y., Z. Dong, **D. Chen**, S. Zhao, F. Zhou, X. Cao, K. Fang, 2019: Growth decline of Pinus Massoniana in response to warming induced drought and increasing intrinsic water use efficiency in humid subtropical China. ***Dendrochronologia***, 57: 125609. DOI:10.1016/j.dendro.2019.125609.
312. Li, X., Z. Wen, **D. Chen**, Z. Chen, 2019: Decadal transition of the leading mode of interannual moisture circulation over East Asia-western North Pacific: bonding to different evolution of ENSO. ***Journal of Climate***, 32, 289-308. DOI:10.1175/JCLI-D-18- 0356.1.
313. Liang, E., B. Dawadi, N. Pederson, S. Piao, H. Zhu, S. R. Sigdel, **D. Chen**, 2019: Strong link between large tropical volcanic eruptions and severe droughts prior to monsoon in the central Himalayas revealed by tree-ring records. ***Science Bulletin***, 64(14): 1018-1023. DOI: 10.1016/j.scib.2019.05.002.
314. Liao, Y.-M., **D. Chen**，Q.-F. Liu, 2019: The spatiotemporal characteristics and long-term trends of surface-air temperatures difference in China. ***Advances in Climate Change Research***, Vol. 15, No. 4, 374-384, DOI: 10.12006/j.issn.1673-1719.2018.199 (In Chinese with English abstract).
315. Lin, C., H. Wu, T. Ou, **D. Chen**, 2019: A new perspective on solar dimming over the Tibetan Plateau. ***International Journal of Climatology***, 39:302–316, DOI: 10.1002/joc.5807**.**
316. Liu, Y. W. Cai, C. Sun, H. Song, K.M. Cobb, J. Li, S.W. Leavitt, Z. An, W. Zhou, L. Wu, Q. Cai, R. Liu, B. Ng, P. Cherubini, U. Büentgen, Y. Song, G. Wang, Y. Lei, L. Yan, Q. Li, Y. Ma, C. Fang, J. Sun, X. Li, **D. Chen**, H.W. Linderholm, 2019: Anthropogenic aerosols cause recent pronounced weakening of Asian Summer Monsoon relative to last four centuries. ***Geophysical Research Letters***, 46(10): 5469-5479. DOI:10.1029/2019GL082497.
317. Lu, X., Y. Lu, **D. Chen**, C. Su, S. Song, T. Wang, H. Tian, R. Liang, M. Zhang, K. Khan, 2018: Climate change induced eutrophication of cold-water lake in an ecologically fragile nature reserve. ***Journal of Environmental Sciences***, 75, 359-369. DOI:10.1016/j.jes.2018.05.018.
318. Lu, Y., Y. Zhang, X. Cao, C. Wang, Y. Wang, M. Zhang, R. C. Ferrier, A. Jenkins, J. Yuan, M. J. Bailey, **D. Chen**, H. Tian, H. Li, E. U. von Weizsäckerg, Z. Zhang, 2019: Forty years of reform and opening up: China's progress toward a sustainable path. ***Science Advances***, Vol. 5, No. 8, eaau9413. DOI: 10.1126/sciadv.aau9413**.**
319. Shi, C., C. Sun, X. Wu, **D. Chen**, V. Masson-Delmotte, J. Li, J. Xue, Z. Li, D. Ji, J. Zhang, Z. Fan, M. Shen, L. Shu, P. Ciais, 2019: Summer Temperature over the Tibetan Plateau Modulated by Atlantic Multidecadal Variability. ***Journal of Climate***, 32, 4055–4067, DOI: 10.1175/JCLI-D-17-0858.1.
320. Shi, P., G. Zhang, F. Kong, **D**. **Chen**, C. Azorin-Molina, J. A. Guijarro, 2019: Variability of winter haze over the Beijing-Tianjin-Hebei region tied to wind speed in the lower troposphere and particulate sources. ***Atmospheric Research*** 215, 1-11. DOI: 10.1016/j.atmosres.2018.08.013.
321. Su, B., C. Xiao, **D. Chen**, D. Qin, Y. Ding, 2019: Cryosphere services and human well-being. ***Sustainability***, 11(16), 4365. DOI:10.3390/su11164365.

322. Sun, W., J. Liu, B. Wang, **D. Chen**, F. Liu, Z. Wang, L. Ning, M. Chen, 2019: A "La Niña-like" state occurring in the second year after large tropical volcanic eruptions during the past 1500 years. ***Climate Dynamics***, 52, 7495-7509, DOI:10.1007/s00382-018-4163-x**.**
323. Sun, W., B. Wang, J. Liu, **D. Chen**, C. Gao, L. Ning, L. Chen, 2019: How Northern High-Latitude Volcanic Eruptions in Different Seasons Affect ENSO. ***Journal of Climate***, 32, 3245-3262. DOI: 10.1175/JCLI-D-18-0290.1.
324. Sun, W., B. Wang, Q. Zhang, F.S.R. Pausata, **D. Chen**, G. Lu, M. Yan J. Liu, 2019: Northern Hemisphere land monsoon precipitation increased by the Green Sahara during mid-Holocene. ***Geophysical Research Letters***, 46, 9870–9879. DOI:10.1029/2019GL082116.
325. Tang, Q., C. Lan, F. Su, X. Liu, H. Sun, L. Wang, G. Leng, Y. Zhang, Y. Sang, H. Fang, S. Zhang, D. Han, X. Liu, L. He, X. Xu, Y. Tang, **D. Chen**, 2019: Streamflow change on the Qinghai-Tibet Plateau and its impacts (in Chinese). ***Chi. Sci. Bull.,*** 64, DOI: 10.1360/TB-2019-0141 (in Chinese with English abstract).
326. Wang, M., J. Wang, **D. Chen**, A. Duan,Y. Liu, S. Zhou, D. Guo, H. Wang, W. Ju, 2019: Recent recovery of the boreal spring sensible heating over the Tibetan Plateau will continue in CMIP6 future projections. ***Environmental Research Letters***, 14(12): 124066. DOI:10.1088/1748-9326/ab57a3.
327. Wang, Y., K. Yang, X. Zhou, B. Wang, **D. Chen**, H. Lu, C. Lin, F. Zhang, 2019: The formation of a dry-belt in the north side of central Himalaya Mountains. ***Geophysical Research Letters***, 46. DOI: 10.1029/2018GL081061.
328. Wu, X., W. Guo, H. Liu, X. Li, C. Peng, C. D. Allen, C. Zhang, P. Wang, T. Pei, Y. Ma, Y. Tian, Z. Song, W. Zhu, Y. Wang, Z. Li, **D. Chen,** 2019: Exposures to temperature beyond threshold disproportionately reduce vegetation growth in the northern hemisphere, ***National Science Review***, 6, 786-795**.** DOI: 10.1093/nsr/nwy158.
329. Yang, J., S. Kang, **D. Chen**, Z. Ji, L. Tripathee, X. Chen, W. Du, G. Qiu, 2019: Quantifying the contributions of various emission sources to black carbon and assessment of control strategies in western China. ***Atmospheric Research***, 215, 178-192, DOI:10.1016/j.atmosres.2018.09.003.
330. Yao, T., Y. Xue, **D. Chen**, F. Chen, L. Thompson, P. Cui, T. Koike, W. Lau, D. Lettenmaire, V. Mosbrugger, R. Zhang, B. Xu, J. Dozier, T. Gillespie, Y. Gu, S. Kang, S. Piao, S. Sugimoto, S., K. Ueno, L. Wang, W. Wang, F. Zhang, Y. Sheng, W. Guo, L., Ai, X. Yang, Y. Ma, S. Shen, Z. Su, F. Chen, S. Liang, Y. Liu, V. P. Singh, K. Yang, D. Yang, X. Zhao, Y. Qian, Y. Zhang, Q. Li, 2019: Recent Third Pole's rapid warming accompanies cryospheric melt and water cycle intensification and interactions between monsoon and environment: multi-disciplinary approach with observation, modeling and analysis. ***Bulletin of American Meteorological Society***, 100(3): 423-444. DOI: 10.1175/BAMS-D-17-0057.1.
331. Zeng, Z., A. D. Ziegler, T. Searchinger, L. Yang, A. Chen, K. Ju, S. Piao, L. Z. X. Li, P. Ciais, **D. Chen**, J. Liu, C. Azorin-Molina, A. Chappell, D. Medvigy, E. F. Wood, 2019: A reversal in global terrestrial stilling and its implications for wind energy production. ***Nature Climate Chang***, 9(12): 979-985. DOI:10.1038/s41558-019-0622-6.
332. Zhang, C., Q. Tang, **D. Chen,** R. van der Ent, X., Liu, W. Li, and G. Haile, 2019: Moisture source changes contributed to different precipitation changes over the northern and southern Tibetan Plateau. ***Journal of Hydrometeorology***, 20: 217-229. DOI:10.1175/JHM-D-18-0094.1.
333. Zhang, F., F.-U.-R. Qaiser, C. Zeng, R. R. Pant, G. Wang, H. Zhang, **D. Chen**, 2019: Meltwater hydrochemistry at four glacial catchments in the headwater of Indus River. ***Environmental Science and Pollution Research***, 26: 23645-23660. DOI:10.1007/s11356-019-05422-5.
334. Zhang, G., C. Azorin-Molina, D. Lin, J. A. Guijarro, F. Kong, P. Shi, **D. Chen**, 2019: Impact of near-surface wind speed variability on wind erosion in the eastern agro-pastoral transitional zone of Northern China, 1982-2016. ***Agricultural and Forest Meteorology***, 271, 102-115. DOI: 10.1016/j.agrformet.2019.02.039.
335. Zhang, X., X. Li, **D. Chen**, H. Cui, Q. Ge, 2019: Overestimated climate warming and climate variability due to spatially homogeneous CO2 in climate modeling over the Northern Hemisphere since the mid-19th century. ***Scientific Reports***, 9, 17426. DOI: 10.1038/s41598-019-53513-7.

336. Zhang, X., L. Wang, **D. Chen**, 2019: How does temporal trend of reference evapotranspiration over the Tibetan Plateau change with elevation? ***International Journal of Climatology***, 39, 2295-2305. DOI:10.1002/joc.5951.
337. Zhang, Z., K. Wang, **D. Chen**, J. Li, R. Dickinson, 2019: Increase in Surface Friction Dominates the Observed Surface Wind Speed Decline during 1973–2014 in the Northern Hemisphere Lands. ***Journal of Climate***, 32(21): 7421-7435. DOI:10.1175/JCLI-D-18-0691.1.
338. Azorin-Molina, C., J. Asin, T. McVicar, l. Minola, I. Lopez, S. Vicente-Serrano, **D. Chen**, 2018: Evaluating anemometer drift: A statistical approach to correct biases in wind speed measurement. ***Atmospheric Research***, 203, 175-188**.**
339. Azorin-Molina, C., M. Menendez, A. Acevedo, S. M. Vicente-Serrano, T. R. McVicar, E. Cuevas, L. Minola, **D. Chen,** 2018: Wind speed variability over the Canary Islands, 1948–2014: focusing on trend differences at the land–ocean interface and below–above the trade-wind inversion layer. ***Climate Dynamics***, 50: 4061-4081, DOI: 10.1007/s00382-017-3861-0**.**
340. Azorin-Molina, C., S. Rehman, J. A. Guijarro, T. R. McVicar, L. Minola, **D. Chen**, S. M. Vicente-Serrano, 2018: Recent trends in wind speed across Saudi Arabia, 1978-2013: a break in the stilling. ***International Journal of Climatology***, 38: e966-e984. DOI: 10.1002/joc.5423**.**
341. Bibi, S., L. Wang, X. Li, J. Zhou, **D. Chen**, T. Yao, 2018: Climatic and associated cryospheric, biospheric and hydrological changes on the Tibetan Plateau: a review. ***International Journal of Climatology***, 38: e1-e17. DOI: 10.1002/joc.5411.
342. Chen, A., **D. Chen**, C. Azorin-Molina, 2018: Assessing reliability of precipitation data over the Mekong River Basin: a comparison of ground-based, satellite, and reanalysis datasets, ***International Journal of Climatology***, 38(11): 4314-4334. DOI:10.1002/joc.5670.
343. Fang, K., **D. Chen**, L. Ilvonen, D. Frank, L. Pasanen, L. Holmström, Y. Zhao, P. Zhang, H. Seppä, 2018: Time-varying relationships among oceanic and atmospheric modes: A turning point at around 1940. ***Quaternary International*** 487, 12-25. DOI:10.1016/j.quaint.2017.09.005**.**
344. Fang, K., E. Cook, Z. Guo, **D. Chen**, T. Ou, D. Frank, Y. Zhao, 2018: Synchronous multi-decadal climate variability of the whole Pacific areas revealed in tree rings since 1567. ***Environmental Research Letters***, 13(2): 024016. DOI:10.1088/1748-9326/aa9f74.
345. Gao, Y., L. Xiao, **D. Chen**, J. Xu, H. Zhang, 2018: Comparison between past and future extreme precipitations simulated by global and regional climate models over the Tibetan Plateau. ***International Journal of Climatology*** **38**, 1285-1297, DOI: 10.1002/joc.5243.
346. Hu, Z., Q. Zhou, X. Chen, J. Li, Q. Li, **D. Chen**, W. Liu, G. Yin, 2018: Evaluation of three global gridded precipitation datasets in Central Asia based on rain gauge observations, ***International Journal of Climatology***, 38(9): 3475-3493. DOI: 10.1002/joc.5510.
347. Irannezhad, M., M. Minaei, S. Ahmadian, **D. Chen**, 2018: Impacts of changes in climate and land cover-land use on flood characteristics in Gorganrood watershed (northeastern Iran) during recent decades. ***Geografiska Annaler: Series A, Physical Geography***, 100 (4), 340-350**.** DOI: 10.1080/04353676.2018.1515578.
348. Li, R.Q., Y.H. Gao, **D.L. Chen**,Y.X. Zhang, S.S. Li., 2018: Contrasting vegetation changes in dry and humid regions of the Tibetan Plateau over recent decades. ***Sciences in Cold and Arid Regions***, 10(6): 482-492. DOI: 10.3724/SP.J.1226.2018.00482.
349. Lin, C., **D. Chen**, K. Yang, T. Ou, 2018: Impact of model resolution on simulating the water vapor transport through the Himalayas: implication for models' wet bias over the Tibetan Plateau. ***Climate Dynamics***, 51: 3195-3207. DOI:10.1007/s00382-018-4074-x.
350. Liu, F., C. Xing, L. Sun, B. Wang, **D. Chen**, J. Liu, 2018: How do tropical, Northern Hemispheric and Southern Hemispheric volcanic eruptions affect ENSO under different initial ocean conditions? ***Geophysical Research Letters***, 45, 13,041-13,049. DOI:10.1029/2018GL080315.
351. Liu, W., W.-H. Lim, F. Sun, D. Mitchell, H. Wang, **D. Chen**, I. Bethke, H. Shiogama, E. Fischer, 2018: Global Freshwater availability below normal conditions and population impact under 1.5˚C and 2˚C stabilization scenarios. ***Geophysical Research Letters***, 45(18): 9803-9813. DOI: 10.1029/2018GL078789.
352. Lu, Y., R. Wang, Y. Shi, C. Su, J. Yuan, A. Johnson, A. Jenkins, R. Ferrier, **D. Chen**, H. Tian, J.

Melillo, S. Song, A. Ellison, 2018: Interaction between Pollution and Climate Change Augments Ecological Risk to a Coastal Ecosystem. ***Ecosystem Health and Sustainability***, 4 (7), 161-168. DOI:10.1080/20964129.2018.1500428.

353. Nam, C.C., D.-S. R. Park, C.-H. Ho, **D. Chen**, 2018: Dependency of tropical cyclone risk on track in South Korea, ***Nat. Hazards Earth Syst. Sci.,*** 18, 3225-3234, DOI:10.5194/nhess-18-3225-2018.
354. Park, C.-E., S.-J. Jeong, M. Joshi, T. J. Osborn, C.-H. Ho, S. Piao, **D. Chen**, J. Liu, H. Yang, H. Park, B.-M. Kim, S. Feng, 2018: Keeping global warming within 1.5ºC constrains emergence of aridification. ***Nature Climate Change***, 8(1): 70-74. DOI:10.1038/s41558-017-0034-4.
355. Qi, W., J. Liu, **D. Chen**, 2018: Evaluations and improvements of GLDAS 2.0 and 2.1 forcing data's applicability for basin scale hydrological simulations in the Tibetan Plateau. ***Journal of Geophysical Research: Atmospheres***, 123, 13,128-13,148. DOI:10.1029/2018JD029116***.***
356. Shi, F., X. Wu, X. Li, **D. Chen**, H. Liu, S. Liu, X. Hu, C. Shi, P. Wang, R. Mao, Y. Ma, Y. Huang, 2018: Weakening Relationship Between Vegetation Growth Over the Tibetan Plateau and Large-Scale Climate Variability. ***Journal of Geophysical Research-Biogeosciences***, 123, 1247-1259, DOI: 10.1002/2017JG004134.
357. Su, C., S. Song, Y. Lu, S. Liu, J. Giesy, **D. Chen**, A. Jenkins, A.J. Sweetman, B. Yvette, 2018: Potential Effects of Changes in Climate and Emissions on Distribution and Fate of Perfluorooctane Sulfonate in the Bohai Rim, China. ***Science of the Total Environment***, 613–614, 352–360, DOI: 10.1016/j.scitotenv.2017.09.021.
358. Wang, F., Q. Ge, **D. Chen**, J. Luterbacher, K.B. Tokarska, Z. Hao, Y. Liu and M. Wu, 2018: Global and regional climate responses to national-committed emission reductions under the Paris Agreement. ***Geografiska Annaler: Series A, Physical Geography***, 100 (3), 240-253. DOI: 10.1080/04353676.2018.1488538.
359. Wang, Y., L. Wang, X. Li, **D. Chen**, 2018: Temporal and spatial changes in the near-surface air temperature lapse rates on Tibetan Plateau. ***International Journal of Climatology***, 38(7): 2907-2921. DOI:10.1002/joc.5471.
360. Yang, J. H., Z. M. Ji, **D. L. Chen**, S. C. Kang, C. S. Fu, K. Q. Duan, and M. G. Shen, 2018: Improved land use and leaf area index enhances WRF-3DVAR satellite radiance assimilation: a case study focusing on rainfall simulation in the Shule River Basin during July 2013. ***Advances in Atmospheric Sciences***, 35 (6), 628-644, DOI:10.1007/s00376-017-7120-4.
361. Yang, J., S. Kang, Z. Ji, **D. Chen**, 2018: Modeling the origin of anthropogenic black carbon and its climatic effect over the Tibetan Plateau and surrounding regions. ***Journal of Geophysical Research: Atmospheres***, 123. 671-692. *DOI:10.1002/2017JD027282*.
362. Zhang, X., **D. Chen**, T. Yao, 2018: Evaluation of circulation type classifications with respect to temperature and precipitation variations in the central and eastern Tibetan Plateau. ***International Journal of Climatology***, 38(13): 4938-4949. DOI: 10.1002/joc.5708.
363. Fang, K., Z. Guo, **D. Chen**, H. Linderholm, J. Li, F. Zhou, G. Guo, Z. Dong, Y. Li, 2017: Drought variation of western Chinese Loess Plateau since 1568 and its linkages with droughts in western North America. ***Climate Dynamics***, 49: 3839-3850. DOI 10.1007/s00382-017-3545-9.
364. Gao, Y., **D**. **Chen**, 2017: Modeling of Regional Climate over the Tibetan Plateau. ***Oxford Research Encyclopedia of Climate Science***. Retrieved 15 Dec. 2017, from http://climatescience.oxfordre.com/view/10.1093/acrefore/9780190228620.001.0001/acrefore-9780190228620-e-591.
365. Grundström, M., Å. Dahl, T. Ou, **D. Chen**, H. Pleijel, 2017: The relationship between birch pollen, air pollution and weather types and their effect on antihistamine purchase in two Swedish cities. ***Aerobiologia***, 33: 457-471. DOI 10.1007/s10453-017-9478-2.
366. Irannezhad, M., **D. Chen**, B. Kløve, H. Moradkhani, 2017: Analysing the Variability and Trends of Precipitation Extremes in Finland and Their Connection to Atmospheric Circulation Patterns, ***International Journal of Climatology***, 37: 1053-1066. DOI: 10.1002/joc.5059.
367. Irannezhad, M., A.-K. Ronkanen, S. Kiani, **D. Chen**, B. Kløve, 2017: Long-term variability and trends in annual snowfall/total precipitation ratio in Finland and the role of atmospheric circulation patterns. ***Cold Regions Science and Technology*** 143, 23-31. DOI: 10.1016/j.coldregions.2017.08.008.

368. Lehsten V., L. Wiik, A. Hannukkala, E. Andreasson, **D. Chen**, T. Ou, E. Liljeroth, Å. Lankinen, L. Grenville-Briggs, 2017: Earlier occurrence and increased explanatory power of climate for the first incidence of potato late blight caused by Phytophthora infestans in Fennoscandia. ***PLoS ONE***, 12(5): e0177580. DOI:10.1371/journal.pone.0177580.
369. Li, D., K. Fang, Y. Li, **D. Chen**, X. Liu, Z. Dong, F. Zhou, G. Guo, F. Shi, C. Xu, Y. Li, 2017: Climate, intrinsic water-use efficiency and tree growth over the past 150 years in humid subtropical China. ***PLoS ONE***, 12(2): e0172045. DOI:10.1371/journal.pone.0172045
370. Li, X., L. Wang, X. Guo, **D. Chen**, 2017: Does summer precipitation trend of Tibetan Plateau depend on elevation? ***International Journal of Climatology***, 2016: GC21H-1170. DOI: 10.1002/joc.4978.
371. Liu, Y., K. M. Cobb, H. Song, Q. Li, C.-Y. Li, T. Nakatuska, Z. An, W. Zhou，Q. Cai, J. Li, S. Leavitt, C. Sun, R. Mei, C.-C. Shen, M.H. Chan, J. Sun, L. Yan, Y. Lei, Y. Ma, X. Li, **D. Chen**, H. Linderholm, 2017: Recent enhancement of central Pacific El Niño variability relative to last eight centuries, ***Nature Communications***, 8:15386, DOI: 10.1038/ncomms15386**.**
372. Liu, J., T. Pan, **D. Chen,** X. Zhou, Q. Yu, G. Flerchinger, D. Liu, X. Zou, H. Linderholm, J. Du, D. Wu, Y. Shen, 2017: An improved Ångström-type model for estimating solar radiation over the Tibetan Plateau, ***Energies***, 10, 892; DOI:10.3390/en10070892.
373. Seftigen, K., H. Goosse, F. Klein, **D. Chen**, 2017: Hydroclimate variability in Scandinavia over the last millennium – insights from a climate model–proxy data comparison, ***Clim. Past***, 13, 1831-1850, DOI:10.5194/cp-13-1831-2017.
374. Shi, P., X. Bai, F. Kong, J. Fang, D. Gong, T. Zhou, Y. Guo, Y. Liu, W. Dong, Z. Wei, C. He, D. Yu, J. Wang, Q. Ye, R. Yu, **D. Chen**, 2017: Urbanization and air quality as major drivers of altered spatiotemporal patterns of heavy rainfall in China. ***Landscape Ecology***, 32: 1723-1738. DOI 10.1007/s10980-017-0538-3.
375. Wang, L., L. Sun, K. Yang, L. Tian, Y. Lin, W. Liu, M. Shrestha, Y. Xue, T. Koike, Y. Ma, J. Zhou, X. Li, Y. Chen, **D. Chen**, S. Piao, H. Lu, 2017: Development of a land surface model with coupled snow and frozen soil physics. ***Water Resources Research***, 53(6): 5085-5103. DOI: 10.1002/2017WR020451.
376. Wang, Y., K. Yang, Z. Pan, J. Qin, **D. Chen**, C. Lin, Y. Chen, L., W. Tang, M. Han, N. Lu, H. Wu, 2017: Evaluation of precipitable water vapor from four satellite products and four reanalysis datasets against GPS measurements on the Southern Tibetan Plateau. ***Journal of Climate***, 30, 5699-5713, DOI: 10.1175/JCLI-D-16-0630.1.
377. Wu, J., X. Gao, F. Giorgi, **D. Chen**, 2017: Changes of effective temperature and cold/hot days temperature in late decades over China based on a high resolution gridded observation dataset. ***International Journal of Climatology***, 37: 788-800. DOI: 10.1002/joc.5038.
378. Zhang, C., Q. Tang, **D. Chen**, 2017: Recent changes in the moisture source of precipitation over the Tibetan Plateau, ***Journal of Climate***, 30, 1807-1819. DOI:10.1175/JCLI-D-15-0842.1.
379. Zhang, C., Q. Tang, **D**. **Chen**, L. Li, X. Liu, H. Cui, 2017: Tracing changes in atmospheric moisture supply to the drying Southwest China. ***Atmos. Chem. Phys***., 17, 10383-10393, DOI:10.5194/acp-17-10383-2017.
380. Zhang, G., T. Yao, S. Piao, T. Bolch, H. Xie, **D. Chen**, Y. Gao, C. M. O'Reilly, C.K. Shum, K. Yang, S. Yi, Y. Lei, W. Wang, Y. He, K. Shang, X. Yang, H. Zhang, 2017: Extensive and drastically different alpine lake changes on Asia's high plateaus during the past four decades, ***Geophysical Research Letters***, 44, 252–260, DOI:10.1002/2016GL072033.
381. Azorin-Molina, C., J.-A. Guijarro, T. R. McVicar, S. M. Vicente-Serrano, **D. Chen**, S. Jerez, F. Espírito-Santo, 2016: Trends on daily peak wind gusts in Spain and Portugal, 1961-2014. ***Journal of Geophysical Research***, 121(3): 1059-1078. DOI: 10.1002/2015JD024485.
382. **Chen, D.** Y. Tian, T. Yao, T. Ou, 2016: Satellite measurements reveal strong anisotropy in spatial coherence of climate variations over the Tibet Plateau. ***Scientific Reports***, 6:30304. DOI: 10.1038/srep30304 1.
383. Fan, L. **D. Chen**, 2016: Trends in extreme precipitation indices across China detected using quantile regression, ***Atmospheric Science Letters***, 121(3): 1059-1078. DOI:10.1002/asl.671.

384. Gao, Y., L. Xiao, **D. Chen**, F. Chen, J. Xu, Y. Xu, 2016: Quantification of the relative role of land surface processes and large scale forcing in dynamic downscaling over the Tibetan Plateau, ***Climate Dynamics,*** DOI 10.1007/s00382-016-3168-6.
385. Irannezhad, M., **D. Chen**, B. Kløve, 2016: The role of atmospheric circulation patterns in agroclimate variability in Finland: 1961-2011, ***Geografiska Annaler: Series A***, 98(4): 287-301. DOI:10.1111/geoa.12137.
386. Irannezhad, M., H. Marttila, **D. Chen**, B. Kløve, 2016: Century-long variability and trends in daily precipitation characteristics at three Finnish stations. ***Advances in Climate Change Research***, 7(1-2): 54-69. DOI: 10.1016/j.accre.2016.04.004**.**
387. Koutsouris, A. J., **D. Chen**, S. W. Lyon, 2016: Comparing global precipitation datasets in eastern Africa: a case study of Kilombero valley, Tanzania, ***International Journal of Climatology***, 36, 2000-2014, DOI: 10.1002/joc.4476.
388. Liu, W., L. Wang, **D. Chen**, K. Tue, C. Ruan, Z. Hu, 2016: Large-scale circulation classification and its links to observed precipitation in the eastern and central Tibetan Plateau, ***Climate Dynamics***, 46, 3481-3497, DOI: 10.1007/s00382-015-2782-z.
389. Minola, L., C. Azorin-Molina, **D. Chen**, 2016: Homogenization and assessment of observed near-surface wind speed trends across Sweden, 1956-2013. ***Journal of Climate***, 27(10): 3692-3712. DOI: 10.1175/JCLI-D-15-0636.1.
390. Pleijel, H., M. Grundström, G. P. Karlsson, P. E. Karlsson, **D. Chen**, 2016: A method to assess the inter-annual weather-dependent variability in air pollution concentration and deposition based on weather typing. ***Atmospheric Environment***, 126, 200-210**,** DOI:10.1016/j.atmosenv.2015.11.053.
391. Shi, Y., X. Gao, Y. Xu, F. Giorgi, **D. Chen**, 2016: Effects of climate change on heating and cooling degree days and potential energy demand in the household sector of China. ***Climate Research***, 67, 135–149. DOI: 10.3354/cr01360.
392. Rayner, D., C. Achberger, **D**. **Chen**, 2016: A multi-state weather generator for daily precipitation for the Torne river basin, northern Sweden/western Finland. ***Advances in Climate Change Research***, 7(1-2): 70-81. DOI: 10.1016/j.accre.2016.06.006.
393. Sichangi, A. W. S., L. Wang, K. Yang, **D. Chen**, Z. Wang, X. Li, J. Zhou, W. Liu, D. Kuria, 2016: Estimating continental river basin discharges using multiple remote sensing data sets, ***Remote Sensing of Environment***, 179, 36-53. DOI: 10.1016/j.rse.2016.03.019
394. Su, F., L. Zhang, T. Ou, **D. Chen**, T. Yao, K. Tong, Y. Qi, 2016: Hydrological response to future climate changes for the major upstream river basins in the Tibetan Plateau. ***Global and Planetary Change***, 136, 82-95, DOI:10.1016/j.gloplacha.2015.10.012.
395. Wang, L., X. Li, Y. Chen, K. Yang, **D. Chen**, J. Zhou, W. Liu, J. Qi, J. Huang, 2016: Validation of the global land data assimilation system based on measurements of soil temperature profiles. ***Agricultural and Forest Meteorology***, DOI: 10.1016/j.agrformet.2016.01.003.
396. Wang, L., L. Sun, M. Shrestha, X. Li, W. Liu, J. Zhou, K. Yang, H. Lu, **D. Chen**, 2016: Improving snow process modeling with satellite-based estimation of near-surface-air-temperature lapse rate. ***Journal of Geophysical Research: Atmospheres***, 121, 12,005–12,030, DOI:10.1002/2016JD025506.
397. Wei, T., W. Dong, J. Moore, Q. Yan, Y. Song, Z. Yang, W. Yuan, J. Chou, X. Cui, X. Yan, Z. Wei, Y. Guo, S. Yang, D. Tian, P. Lin, S. Yang, Z. Wen, H. Lin, M. Chen, G. Feng, Y. Jiang, X. Zhu, J. Chen, X. Wei, W. Shi, Z. Zhang, J. Dong, Y. Li, **D. Chen**, 2016: Quantitative estimation of the climatic effects of carbon transferred by international trade. ***Scientific Reports***, 6, DOI:10.1038/srep28046.
398. Xu, J., Y. Gao, **D. Chen**, L. Xiao, T. Ou, 2016: Evaluation of Global Climate Models for downscaling applications centered over the Tibetan Plateau. ***International Journal of Climatology***, 37(2): 657-671. DOI: 10.1002/joc.4731.
399. Zhang, P., M. Ionita, G. Lohmann, **D. Chen**, H. W. Linderholm, 2016: Can tree-ring density data reflect summer temperature extremes and associated circulation patterns over Fennoscandia? ***Climate Dynamics***, 49: 2721-2736. DOI:10.1007/s00382-016-3452-5.
400. Zhang, P., H. W. Linderholm, B. E. Gunnarson, J. Björklund, **D. Chen**, 2016: 1200 years of warm-season temperature variability in central Scandinavia inferred from tree-ring density. ***Clim. Past***, 12, 1297-1312, DOI:10.5194/cp-12-1297-2016.

401. Benestad, R.E., **D. Chen**, A. Mezghani, L. Fan, K. Parding, 2015: On using principal components to represent stations in empirical-statistical downscaling, ***Tellus A,*** 67, 28326, DOI: 10.3402/tellusa.v67.28326.
402. **Chen, D.,** Xu, B., Yao, T., Guo, Z., Cui, P., Chen, F., Zhang, R., Zhang, X., Zhang, Y., Fan, J., Hou, Z., and Zhang, T., 2015: Assessment of past, present and future environmental changes on the Tibetan Plateau, ***Chinese Science Bulletin***, 60(32), 3025-3035. DOI: 10.1360/N972014-01370 (In Chinese with English abstract).
403. Gao, Y., D. Li, L. R. Leung, **D**. **Chen**, J. Xu, 2015: Aridity changes in the Tibetan Plateau in a warming climate. ***Environmental Research Letters***, 10(3): 034013. DOI: 10.1088/1748-9326/10/3/034013.
404. Gao, Y., J. Xu, **D. Chen**, 2015: Evaluation of WRF mesoscale climate simulations over the Tibetan Plateau during 1979-2011, ***Journal of Climate***, 28(7), 2823-2841, DOI:10.1175/JCLI-D-14-00300.1.
405. Grundström, M., C. Hak, D. Chen, M. Hallquist, H. Pleijel, 2015: Variation and co-variation of PM10, particle number concentration, NOx and NO2 in the urban air - relationships with wind speed, vertical temperature gradient and weather type. ***Atmospheric Environment,*** 120, 317-327. DOI: 10.1016/j.atmosenv.2015.08.057
406. Grundström, M. L. Tang, M. Hallquist, H. Nguyen, **D. Chen**, H. Pleijel, 2015: Influence of atmospheric circulation patterns on urban air quality during the winter, ***Atmospheric Pollution Research***, 6, 278-285, DOI:10.5094/APR.2015.03.
407. Jin, K., F. Wang, **D. Chen**, Q. Jiao, L. Xia, L. Fleskens, X. Mu, 2015: Assessment of urban effect on observed warming trends during 1955-2012 over China: a case of 45 cities, ***Climatic Change***, 5(1): 15135. DOI 10.1007/s10584-015-1446-7.
408. Lin, C., K. Yang, J. Huang, W. Tang, J. Qin, X. Niu, Y. Chen, **D. Chen**, N. Lu, R. Fu, 2015: Impacts of wind stilling on solar radiation variability in China. ***Scientific Reports***, 5(1): 15135. DOI: 10.1038/srep15135
409. Liu J, H. Linderholm, **D. Chen**, X. Zhou, G. N. Flerchinger, Q. Yu, J. Du, D. Wu, Y. Shen, Z. Yang, 2015: Changes in the relationship between solar radiation and sunshine duration in large cities of China, ***Energy***, 82: 589-600. DOI: 10.1016/j.energy.2015.01.068
410. Liu, W., A. Zhang, L. Wang, G. Fu, **D. Chen**, C. Liu, T. Cai, 2015: Projecting streamflow in the Tangwang River basin (China) using a rainfall generator and two hydrological models, ***Climate Research***, 62, 79–97, DOI: 10.3354/cr01261.
411. Oh, H.-R., C.-H. Ho, J. Kim, **D. Chen**, S. Lee, Y.-S. Choi, L.-S. Chang, C.-K. Song, 2015: Long-range transport of air pollutants originating in China: A possible major cause of multi-day high-PM10 episodes during cold season in Seoul, Korea. ***Atmospheric Environment***, 109, 23-30. DOI:10.1016/j.atmosenv.2015.03.005.
412. Ou, T., **D. Chen**, J.-H. Jeong, H. W. Linderholm, T. Zhou, 2015: Changes in winter cold surges over Southeast China: 1961 to 2012. ***Asia-Pacific Journal of Atmospheric Sciences***, 51: 29-37. DOI:10.1007/s13143-014-0057-y.
413. Qian, W., K. Wu, **D. Chen**, 2015: The Arctic and Polar cells act on the Arctic sea ice variation, ***Tellus A***, 67, 27692, DOI: 10.3402/tellusa.v67.27692.
414. Shen, M., S. Piao, S.-J. Jeong, L. Zhou, Z. Zeng, P. Ciais, **D. Chen**, C.-S. Jin, L. Z. X. Li, Y. Li, R. B. Myneni, K. Yang, G. Zhang, Y. Zhang, T. Yao, 2015: Evaporative cooling over the Tibetan plateau induced by vegetation growth, ***Proceedings of the National Academy of Sciences of the United States of America***, 112, 9299-9304**.** DOI: 10.1073/pnas.1504418112.
415. Yao, T., **D. Chen**, and B. Xu, 2015: Editors' words for the Special issue on the environmental changes over the Tibetan Plateau, ***Chinese Science Bulletin*** 60(32), 3023-3024 (In Chinese).
416. Zetterberg, L., **D. Chen**, 2015: The time aspect of bioenergy - Climate impacts of solid biofuels due to biogenic carbon dynamics, ***GCB Bioenergy***, 7, 785–796, DOI: 10.1111/gcbb.12174.
417. Zhang, P., **D. Chen**, H.W. Linderholm, Q. Zhang, 2015: How similar are annual and summer temperature variability in central Sweden? ***Advances in Climate Change Research***, 6(3), 159-170**,** DOI: 10.1016/j.accre.2015.11.001.

418. Azorin-Molina, C., S. M. Vicente-Serrano, **D. Chen**, B. H. Connell, J. Revuelto, and J.-I. Lopez-Moreno, 2014: AVHRR warm-season cloud climatologies under various synoptic regimes across the Iberian peninsula and the Balearic islands, ***International Journal of Climatology***, 35(8): 1984-2002. DOI: 10.1002/joc.4102.
419. **Chen, D.,** C. Achberger, T. Ou, U. Postgård, A. Walther, Y. Liao, 2014: Projecting future local precipitation and its extremes for Sweden, ***Geografiska Annaler***, 97(1): 25-39. DOI:10.1111/geoa.12084.
420. Fan, L., Z. Yan, **D. Chen**, C. Fu, 2014: Comparison between two statistical downscaling methods for summer daily rainfall in Chongqing, China. ***International Journal of Climatology***, 35(13): 3781-3797. DOI: 10.1002/joc.4246.
421. Fang, K., **D. Chen**, J. Li, H. Seppä, 2014: Covarying hydroclimate patterns between Monsoonal Asia and North America over the past 600 years. ***Journal of Climate***, 27(21): 8017-8033. DOI: 10.1175/JCLI-D-13-00364.1.
422. Fang, K., H. Seppä, **D. Chen**, 2014: Interdecadal hydroclimate teleconnections between Asia and North America over the past 600 years. ***Climate Dynamics***, 44: 1777-1787. DOI 10.1007/s00382-014-2266-6.
423. Irannezhad, M., **D. Chen** and B. Kløve, 2014: Interannual variations and trends in surface air temperature in Finland in relation to atmospheric circulation patterns, 1961-2011, ***International Journal of Climatology***, 35(10): 3078-3092. DOI: 10.1002/joc.4193.
424. Irannezhad, M., A. T. Haghighi, **D. Chen**, B. Kløve, 2014: Variability in Dryness and Wetness in Central Finland and the Role of Teleconnection Patterns, ***Theoretical and Applied Climatology***, 122: 471-486. DOI 10.1007/s00704-014-1305-x.
425. Jeong, J.-H., J.-S. Kug, H. W. Linderholm, **D. Chen**, B.-M. Kim, S.-Y. Jun, 2014: Intensified Arctic warming under greenhouse warming by vegetation-atmosphere-sea ice interaction, ***Environmental Research Letters***, 9**,** 094007, DOI: 10.1088/1748-9326/9/9/094007.
426. Li, X., L. Wang, **D. Chen,** K. Yang, A. Wang, 2014: Seasonal evapotranspiration changes (1983-2006) of four large basins on the Tibetan Plateau, ***Journal of Geophysical Research***, 119 (23), 13079-13095, DOI:10.1002/2014JD022380.
427. Li, X., W. Zhou, **D. Chen**, C. Li, J. Song, 2014: Water vapor transport and moisture budget over East China: Remote forcing from the two types of El Niño, ***Journal of Climate***, 27: 8778-8792, DOI: 10.1175/JCLI-D-14-00049.1.
428. Linderholm, H. W., M. Cardinale, V. Bartolino, **D. Chen**, T. Ou, H. Svedäng, 2014: Influences of large- and regional-scale climate on fish recruitment in the Skagerrak-Kattegat over the last century. ***Journal of Marine Systems*** 134, 1-11. DOI: 10.1016/j.jmarsys.2014.02.006
429. Wang, W., W. Zhou, **D. Chen**, 2014: Summer High Temperature Extremes in Southeast China: Bonding with the El Niño-Southern Oscillation and East Asian Summer Monsoon Coupled System, ***Journal of Climate***, 27(11), 4122-4138, DOI: 10.1175/JCLI-D-13-00545.1.
430. **Chen, D.**, H. W. Chen, 2013: Using the Köppen classification to quantify climate variation and change: an example for 1901-2010. ***Environmental Development*** 6, 69-79. DOI: 10.1016/j.envdev.2013.03.007
431. Chen, H. W., Q. Zhang, H. Körnich, **D. Chen**, 2013: A robust mode of climate variability in the Arctic: The Barents Oscillation. ***Geophysical Research Letters***, 40 (11), 2856–2861, DOI: 10.1002/grl.50551.
432. Fan, L., **D. Chen**, C. Fu, Z. Yan, 2013: Statistical downscaling of summer temperature extremes in Northern China. ***Advances in Atmospheric Sciences***, 30(4), 1085–1095, DOI: 10.1007/s00376-012-2057-0.
433. Jeong, J.-H., H.W. Linderholm, S.-H. Woo, C. Folland, B.-M. Kim, S.-J.g Kim, **D. Chen**, 2013: Impacts of Snow Initialization on Subseasonal Forecasts of Surface Air Temperature for the Cold Season. ***Journal of Climate***, 26(6): 1956-1972. DOI: 10.1175/JCLI-D-12-00159.1
434. Li, X., L. Wang, **D. Chen**, K. Yang, B. Xue, L. Sun, 2013: Near-surface air temperature lapse rates in the mainland China during 1962-2011. ***Journal of Geophysical Research,*** 118, 7505–7515, DOI:10.1002/jgrd.50553.

435. Liao, Y., **D. Chen**, and Y. Xie, 2013: Impacts of climate changes on parameters of weather generator BCC/RCG-WG for daily non-precipitation variables simulation in China, ***Acta Geographica Sinica,*** 68(3), 414-427 (in Chinese with English abstract).
436. Liao, Y., **D. Chen**, and Y. Xie, 2013: Spatial variability of the parameters of the Chinese stochastic weather generator for daily non-precipitation variables simulation in China. ***Acta Meteorologica Sinica***, 71(6), 1103-1114. DOI: 10.11676/qxxb2013.089 (in Chinese with English abstract).
437. Ou, T., **D. Chen**, H. W. Linderholm, J.-H. Jeong, 2013: Evaluation of global climate models in simulating extreme precipitation in China, ***Tellus A***, 65, 19799, DOI: 10.3402/tellusa.v65i0.19799.
438. Su, F., X. Duan, **D. Chen**, Z. Hao, C. Lan, 2013: Evaluation of the Global Climate Models in the CMIP5 over the Tibetan Plateau. ***Journal of Climate***, 26, 3187-3208. DOI: 10.1175/JCLI-D-12-00321.1
439. Walther, A. J.-H. Jeong, G. Nikulin, C. Jones, **D. Chen**, 2013: Evaluation of the warm season diurnal cycle of precipitation over Sweden simulated by the Rossby Centre regional climate model RCA3. ***Atmospheric Research***, 119, 131-139, DOI: 10.1016/j.atmosres.2011.10.012.
440. Xue, B.-L., L. Wang, X. Li, K. Yang, **D. Chen**, L. Sun, 2013: Evaluation of evapotranspiration estimates for two river basins on the Tibetan Plateau by a water balance method, ***Journal of Hydrology***, 492, 290-297. DOI: 10.1016/j.jhydrol.2013.04.005.
441. Yasunari, T., M. Taniguchi, D. Niles, **D. Chen**, 2013: Asia: Proving Ground for Global Sustainability, ***Current Opinion in Environmental Sustainability,*** 5**,** 288-292.
442. Burauskaite-Harju, B., A. Grimvall, A. Walther, C. Achberger, **D. Chen**, 2012: Characterizing and visualizing spatio-temporal patterns in hourly precipitation records. ***Theoretical and Applied Climatology***, 109: 333-343. DOI: 10.1007/s00704-011-0574-x.
443. Gao, G., C.-Y. Xu, D. Chen, V. P. Singh, 2012: Spatial and temporal characteristics of actual evapotranspiration over Haihe River basin in China. ***Stochastic Environmental Research and Risk Assessment***, 26, 655-669, DOI: 10.1007/s00477-011-0525-1.
444. Gu, W., L. Chen, W. Li, **D. Chen**, 2012: Development of a downscaling method in China regional summer precipitation prediction, ***Acta Meteorologica Sinica***, 70(2), 202-212 (in Chinese with English abstract).
445. Jeong, J.-H., J.-S. Kug, B.-M. Kim, S.-K. Min, H.W. Linderholm, C.-H. Ho, D. Rayner, **D. Chen**, S.-Y. Jun, 2012: Greening in the circumpolar high-latitude may amplify warming in the growing season. ***Climate Dynamics***, 38, 1421-1431, DOI: 10.1007/s00382-011-1142-x.
446. Klingberg, J, P.E. Karlsson, P. G. Karlsson, Y. Hu, **D. Chen**, H. Pleijel, 2012: Variation in ozone exposure in the landscape of southern Sweden with consideration of topography and coastal climate. ***Atmospheric Environment,*** 47, 252-260. DOI: 10.1016/j.atmosenv.2011.11.004
447. Liao, Y., **D. Chen**, and Y. Xie, 2012: Spatial and temporal distribution of dry spells in china, ***Acta Geographica Sinica,*** 67(3), 321-336 (in Chinese with English abstract).
448. Liu J., J. Liu, H. W. Linderholm, **D. Chen**, Q. Yu, D. Wu, S. Haginoya, 2012: Observation and calculation of the solar radiation on the Tibetan Plateau. ***Energy Conversion and Management***, 57, 23-32. DOI: 10.1016/j.enconman.2011.12.007
449. Qian, W., X. Shan, **D. Chen**, C. Zhu, Y. Zhu, 2012: Droughts near the northern fringe of the East Asian summer monsoon in China during 1470-2003. ***Climatic Change***, 110, 373-383, DOI: 10.1007/s10584-011-0096-7.
450. Song, Y.-L., **D.-L. Chen**, Y.-J. Liu, Y. Xu, 2012: The influence of climate change on winter wheat during 2012-2100 under A2 and A1B scenarios in China. ***Adv. Clim. Change Res.***, 3(3), 138-146, DOI: 10.3724/SP.J.1248.2012.00138.
451. Azorin-Molina, C., **D. Chen**, S. Tijm, M. Baldi, 2011: A multi-year study of sea breezes in a Mediterranean coastal site: Alicante (Spain). ***International Journal of Climatology***, 31, 468-486. DOI: 10.1002/joc.2064
452. Azorin-Molina, C., S. Tijm, **D. Chen**, 2011: Development of selection algorithms and databases for sea breeze studies. ***Theoretical and Applied Climatology***, 106, 531-546, DOI: 10.1007/s00704-011-0454-4.
453. Fan, L., C. Fu, **D. Chen**, 2011: Long-term trend of temperature derived by statistical downscaling based on EOF analysis. ***Acta Meteorologica Sinica*** 25, 327-339, DOI: 10.1007/s13351-011-0308-0.

454. Gu, W., L. Chen, W. Li, **D. Chen**, 2011: Development of a downscaling method in China regional summer precipitation prediction. ***Acta Meteorologica Sinica***, 25(3), 303-315, DOI:10.1007/s13351-011-0306-2.

455. Hansson, C. Eriksson, A. Omstedt, **D. Chen**, 2011: Reconstruction of the river run-off to the Baltic Sea during the period AD 1500 – 1995. ***International Journal of Climatology***, 31, 696-703, DOI: 10.1002/joc.2097.

456. Jeong, J.-H., C.-H. Ho, H. W. Linderholm, S.-J. Jeong, **D. Chen**, Y.-S. Choi, 2011: Impact of urban warming on earlier spring flowering in Korea. ***International Journal of Climatology***, 31, 1488-1497, DOI: 10.1002/joc.2178

457. Jeong, J.-H., T. Ou, H. W. Linderholm, B.-M. Kim, S.-J. Kim, J.-S. Kug, **D. Chen**, 2011: Recent Recovery of the Siberian High Intensity. ***Journal of Geophysical Research***, 116, D23102, DOI: 10.1029/2011JD015904.

458. Jeong J.-H., A. Walther, G. Nikulin, **D. Chen**, C. Jones, 2011: Diurnal cycle of precipitation amount and frequency in Sweden: observation versus model simulation. ***Tellus Series A: Dynamic Meteorology and Oceanography***, 63A, 664–674, DOI: 10.1111/j.1600-0870.2011.00517.x.

459. Liao, Y., L. Liu, **D. Chen**, and Y. Xie, 2011: An evaluation of the BCC/RCG-WG's performance in simulating daily non-precipitation variables in China. ***Acta Meteorologica Sinica***, 69(2), 310-319 (in Chinese with English abstract).

460. Linderholm, H. W., T. Ou, J. Jeong, C. K. Folland, D. Gong, H. Liu, Y. Liu, and **D. Chen**, 2011: Interannual teleconnections between the summer North Atlantic Oscillation and the East Asian summer monsoon. ***Journal of Geophysical Research***, 116, D13107, DOI: 10.1029/2010JD015235.

461. Ou T., Y. Liu, **D. Chen**, D. Rayner, Q. Zhang, G. Gao, W. Xiang, 2011: The Influence of Large-Scale Circulation on the Summer Hydrological Cycle in the Haihe River Basin of China. ***Acta Meteorologica Sinica***, 25, 517-526. DOI: 10.1007/s13351-011-0410-3

462. Yin S.Q., W.J. Li, **D. Chen**, J.-H. Jeong, W.L. Guo, 2011: Diurnal variations of summer precipitation in Beijing area and the possible effect of topography and urbanization. ***Advances in Atmospheric Sciences,*** 28, 725-734, DOI: 10.1007/s00376-010-9240-y.

463. Yin, S., G. Gao, W. Li, **D. Chen**, L. Hao, 2011: Long-term precipitation change by hourly data in Haihe River Basin during 1961-2004. ***Science China Earth Sciences***, 54, 1576-1585, DOI: 10.1007/s11430-011-4232-z.

464. **Chen, D.**, T. Ou, L. Gong, C.-Y. Xu, W. Li, C.-H. Ho, W. Qian, 2010: Spatial interpolation of daily precipitation in China: 1951-2005. ***Advances in Atmospheric Sciences,*** 27, 1221-1232, DOI: 10.1007/s00376-010-9151-y.

465. Gustafsson, M., D. Rayner, **D. Chen**, 2010: Extreme rainfall events in Southern Sweden: Where does the moisture come from? ***Tellus,*** 62A, 605–616, 10.1111/j.1600-0870.2010.00456.x.

466. Jia, X., L. Chen, W. Li, and **D. Chen**, 2010: Statistical downscaling based on BP-CCA: predictability and application to the winter temperature and precipitation in China, ***Acta Meteorologica Sinica***, 68(3), 398-410 (in Chinese with English abstract).

467. Reid, W. V., **D. Chen**, L. Goldfarb, H. Hackmann, Y.-T. Lee, K. Mokhele, E. Ostrom, K. Raivio, J. Rockström, H. J. Schellnhuber, and A. Whyte, 2010: Earth System Science for Global Sustainability: Grand Challenges. ***Science,*** 330, 916-917, DOI: 10.1126/science.1196263.

468. Shapiro, M. A., J. Shukla, G. Brunet, C. Nobre, M. Béland, R. Dole, K. Trenberth, R. Anthes, G. Asrar, L. Barrie, P. Bougeault, G. Brasseur, D. Burridge, A. Busalacchi, J. Caughey, **D. Chen**, J. Church, T. Enomoto, B. Hoskins, Ø. Hov, A. Laing, H. L. Treut, J. Marotzke, G. McBean, G. Meehl, M. Miller, B. Mills, J. Mitchell, M. Moncrieff, T. Nakazawa, H. Olafsson, T. Palmer, D. Parsons, D. Rogers, A. Simmons, A. Troccoli, Z. Toth, L. Uccellini, C. Velden, and J. M. Wallace, 2010: An Earth-system Prediction Initiative for the 21st Century: An international interdisciplinary initiative to accelerate advances in knowledge, prediction, use and value of weather, climate and Earth-system information. ***Bull. Amer. Meteor. Soc.***, 91, 1377-1388, DOI: 10.1175/2010BAMS2944.1.

469. Song, Y., H.W. Linderholm, **D. Chen**, and A. Walther, 2010: Trends of the thermal growing season in China, 1951-2007. ***International Journal of Climatology***, 30, 33-43, DOI: 10.1002/joc.1868.

470. Westerberg, I., A. Walther, J-L. Guerrero, Z. Coello, S. Halldin, C.-Y. Xu, **D. Chen**, L-C. Lundin. 2010: Precipitation data in a mountainous catchment in Honduras: quality assessment, dataset creation and spatiotemporal characteristics. ***Theoretical and Applied Climatology,*** 101, 381-396, DOI: 10.1007/s00704-009-0222-x.
471. Wu, T., R. Yu, F. Zhang, Z. Wang， M. Dong, L. Wang, X. Jin, **D. Chen**, L. Li, 2010: The Beijing Climate Center atmospheric general circulation model: description and its performance for the present-day climate. ***Climate Dynamics***, 34,123-147, DOI: 10.1007/s00382-008-0487-2.
472. Achberger, C., A. Walther, **D. Chen**, A. Obregón, P. Bissolli, J. J. Kennedy, D. E. Parker, 2009: The Nordic and Baltic countries [in "State of the Climate in 2008"]. ***Bull. Amer. Meteor. Soc.,*** 90, S147-S149.
473. Azorin-Molina, C. and **D. Chen**, 2009: A climatological study of the influence of synoptic-scale flow on sea breeze evolution in Alicante (Spain). ***Theoretical and Applied Climatology,*** 96, 249-260, DOI: 10.1007/s00704-008-0028-2.
474. Chen, L.-J., **D.-L. Chen**, H.-J. Wang, J.-H. Yan, 2009: Regionalization of Precipitation Regimes in China, ***Atmospheric and Oceanic Science Letters***, 2 (5), 301-307. DOI: 10.1080/16742834.2009.11446818.
475. Johansson, M., B. Galle, Y. Zhang, C. Rivera, **D. Chen**, K. Wyser, 2009: The dual-beam mini-DOAS technique - measurements of volcanic gas emission, plume height and plume speed with a single instrument. ***Bulletin of Volcanology***, 71, 747-751, DOI: 10.1007/s00445-008-0260-8.
476. Klingberg, J., L. Tang, **D. Chen**, G. P. Karlsson, E. Bäck, H. Pleijel, 2009: Spatial variation of modelled and measured NO, NO2 and O3 concentrations in the polluted urban landscape – relation to meteorology during the Göte-2005 campaign. ***Atmospheric Chemistry and Physics Discussions***, 9, 2081-2111. DOI: 10.5194/acpd-9-2081-2009.
477. Liao, Y., **D. Chen,** G. Gao, and Y. Xie, 2009: Impacts of climate changes on parameters of a weather generator for daily precipitation in China. ***Acta Geographica Sinica,*** 64(7): 871-878 (in Chinese with English abstract).
478. Liu, Y., An, Z., Linderholm, H.W., **Chen, D.**, Song, H., Cai, Q., Sun, J., Li, Q. and Tian, H. 2009: Annual temperatures during the last 2485 years in the Mid-Eastern Tibetan Plateau inferred from tree rings**.** ***Science in China***, D 39 (2): 166-176 (in Chinese with English abstract).
479. Liu, Y., Z. An, H.W. Linderholm, D. Chen, H. Song, Q. Cai, J. Sun, Q. Li, H. Tian, 2009: Annual temperatures during the last 2485 years in the mid-eastern Tibetan Plateau inferred from tree rings. ***Science in China Series D: Earth Sciences***, 52 (3), 348-359. DOI: 10.1007/s11430-009-0025-z
480. Liu, Y., H.W. Linderholm, H. Song, Q. Cai, Q. Tian, J. Sun, **D. Chen**, E. Simelton, K. Seftigen, H. Tian, R. Wang, G. Bao, Z. An, 2009: Temperature variations recorded in Pinus tabulaeformis tree rings from the southern and northern slopes of the central Qinling Mountains, central China. ***Boreas***, 38, 285-291, DOI: 10.1111/j.1502-3885.2008.00065.x.
481. Liu, Y., Tian, Q., Song, H., Sun, J., Linderholm, H.W., **Chen, D**., Cai, Q., Ta, W., Lei, Y. 2009: Tree-ring width based May-June mean temperature reconstruction for Huashan region since AD 1558 and 20th century warming. ***Quaternary Sciences*** 29 (5): 888-895 (in Chinese with English abstract).
482. Miao, J.-F., K. Wyser, **D. Chen**, H. Ritchie, 2009: Impacts of boundary layer turbulence and land surface process parameterizations on simulated sea breeze characteristics. ***Ann. Geophys***., 27, 2303-2320. DOI: 10.5194/angeo-27-2303-2009
483. Nordin, L., T. Gustavsson, J. Bogren, **D. Chen**, H. Li, and H. Tian, 2009: ChiWI– a road weather index for China. ***International Journal of Climatology***, 29, 2337-2347, DOI: 10.1002/joc.1870.
484. Olofson, K. F. G., P. U. Andersson, M. Hallquist, E. Ljungström, L. Tang, **D. Chen**, J. B. C. Pettersson, 2009: Urban aerosol evolution and particle formation during wintertime temperature inversions. ***Atmospheric Environment***, 43, 340-346, DOI:10.1016/j.atmosenv.2008.09.080.
485. Qian, Y., D. Gong, J. Fan, L. R. Leung, R. Bennartz, **D. Chen**, W. Wang, 2009: Heavy pollution suppresses light rain in China: observations and modeling. ***Journal of Geophysical Research***, 114, D00K02, DOI: 10.1029/2008JD011575.
486. Tang, L., **D. Chen**, P.E. Karlsson, Y. Gu, T. Ou, 2009: Synoptic circulation and its influence on spring and summer surface ozone concentrations in southern Sweden. ***Boreal Env. Res.,*** 14, 889-902.

487. Tang L., P.-E. Karlsson, Y. Gu, **D. Chen**, P. Grennfelt, 2009: Synoptic weather types and long-range transport patterns for ozone precursors during high-ozone events in southern Sweden. ***Ambio***, 38, 459-464, DOI: 10.1579/0044-7447-38.8.459.
488. Tang, L., J.-F. Miao, **D. Chen**, 2009: Performance of TAPM against MM5 at urban scale during GÖTE2001 campaign. ***Boreal Env. Res***., 14, 338-350.
489. Wetterhall, F., A. Bárdossy, D. Chen, S. Halldin, C.-Y. Xu, 2009: Statistical downscaling of daily precipitation over Sweden using GCM output. ***Theoretical and Applied Climatology***, 96, 95-103, DOI: 10.1007/s00704-008-0038-0.
490. Yin, S., **D. Chen**, and Y. Xie, 2009: Diurnal variations of precipitation during the warm season over China. ***International Journal of Climatology***, 29, 1154-1170**,** DOI: 10.1002/joc.1758.
491. Yin, S., Y. Xie, **D. Chen**, X. Lin, and W. Li, 2009: Review of Stochastic simulation of sub-daily scale precipitation. ***Advances in Earth Science***, 24, 981−989, (in Chinese with English abstract).
492. Achberger, C., **D. Chen**, J. Cappelen, S. Hellström, K. A. Iden, M. Jonsson, S. Saku, 2008: The Nordic Countries [in "State of the Climate in 2007"]. ***Bulletin of the American Meteorological Society***, 89, S146-S147.
493. Antonsson, K., **D. Chen**, H. Seppä, 2008: Anticyclonic atmospheric circulation as an analogue for the warm and dry mid-Holocene summer climate in central Scandinavia. ***Climate of the Past***, 4, 215-224. DOI: 10.5194/cp-4-215-2008
494. Choi, Yong-Sang, Chang-Hoi Ho, **Deliang Chen**, Yeon-Hee Noh, Chang-Keun Song, 2008: Spectral Analysis of Weekly Variation in PM10 Mass Concentration and Meteorological Conditions over China. ***Atmospheric Environment***, 42，655-666. DOI: 10.1016/j.atmosenv.2007.09.075
495. Fu, J., W. Qian, X. Lin, **D. Chen**, 2008: Trends of graded precipitation days in China from 1961 to 2000. ***Advances in atmospheric Sciences,*** 25 (2), 267-278. DOI: 10.1007/s00376-008-0267-2.
496. Gao G., **D. Chen**, and Y. Xu, 2008: Impact of climate change on runoff in the Huaihe River Basins. ***Journal of Applied Meteorological Science***, 19(6), 741-748 (in Chinese with English abstract).
497. Jeong, J.-H., C.-H. Ho, **D. Chen**, T.-W. Park, 2008: Land surface initialization using an offline CLM3 simulation with the GSWP-2 forcing dataset and its impact on CAM3 simulations of the Boreal summer climate, ***Journal of Hydrometeorology***, 9, 1231-1248, DOI: 10.1175/2008JHM941.1
498. Johansson, M., B. Galle, T. Yu, L. Tang, **D. Chen**, H. Li, J. X. Li, Y. Zhang, 2008: Quantification of total emission of air pollutants from Beijing using mobile mini-DOAS. ***Atmospheric Environment,*** 42, 6926-6933. DOI: 10.1016/j.atmosenv.2008.05.025
499. Lennartsson, J., A. Baxevani, **D. Chen**, 2008: Modelling precipitation in Sweden using multiple step Markov chains and a composite model. ***Journal of Hydrology***, 363, 42-59, DOI:10.1016/j.jhydrol.2008.10.003.
500. Lin, T., Y. Xie, G. Liu, **D. Chen**, and X. Duan, 2008: Impact of climate change on yield in Hailongjiang province. ***Journal of Natural Resources***, 23(2), 307-318 (in Chinese with English abstract).
501. Linderholm, H.W., A. Walther, **D**. **Chen**, 2008: Twentieth-century trends in the thermal growing season in the Greater Baltic Area. ***Climatic Change***, 87, 405-419, DOI: 10.1007/s10584-007-9327-3.
502. Mao, R., D. Gong, and **D. Chen**, 2008: The evident linkage of springtime NDVI over Eurasia with East Asian atmospheric circulation in summer, ***Acta Meteorologica Sinica,*** 66(4), 592−598 (in Chinese with English abstract).
503. Miao, J.-F., **D. Chen**, K. Wyser, K. Borne, J. Lindgren, M. K. S. Strandevall, S. Thorsson, C. Achberger, and E. Almkvist, 2008: Evaluation of MM5 mesoscale model at local scale for air quality applications over the Swedish west coast: Influence of PBL and LSM parameterizations. ***Meteorology and Atmospheric Physics***, 99, 77-103, DOI: 10.1007/s00703-007-0267-2.
504. Achberger, C., J. E. Box, **D. Chen**, 2007: Nordic Region [in "State of the Climate in 2006"]. ***Bulletin of the American Meteorological Society***, 88, S104-S106.
505. **Chen, D.**, L. Gong, C. Xu, S. Halldin, 2007: A high-resolution, gridded dataset for monthly temperature normals (1971-2000) in Sweden. ***Geografiska Annaler***, 89A, 249-261.

506. Ding Y., G. Ren, G. Shi, P. Gong, D. Zheng, P. Zai, D. Zhang, C. Zhao, S. Wang, H. Wang, Y. Luo, **D. Chen**, X. Gao, X. Dai, 2007: China's National Assessment Report on Climate Change ( I ): Climate change in China and the future trend. ***Advances in Climate Change Research***, 3, 1-5.
507. Fan L, C. Fu, and **D. Chen,** 2007: Estimation of local temperature change scenarios in North China using statistical downscaling method. ***Chinese Journal of Atmospheric Sciences,*** 31(5), 887-897 (Chinese with English abstract).
508. Gao, G., **D. Chen**, C.-Y. Xu, E. Simelton, 2007: Trend of estimated actual evapotranspiration over China during 1960-2002. ***Journal of Geophysical Research***, D11120, 112, DOI: 10.1029/2006JD008010.
509. Gong, D.-Y., C.-H. Ho, **D. Chen**, Y. Qian, Y.-S. Choi, J. Kim, 2007: Weekly cycle of aerosol-meteorology interaction over China. ***Journal of Geophysical Research***, 112, D22202, DOI: 10.1029/2007JD008888.
510. Karlsson, P.E., L. Tang, J. Sundberg, **D. Chen**, A. Lindskog, and H. Pleijel, 2007: Increasing risk for negative ozone impacts on the vegetation in northern Sweden. ***Environmental Pollution***, 150, 96-106. DOI: 10.1016/j.envpol.2007.06.016
511. Liao. Y., Q. Zhang, and D. Chen, 2007: Summer climate characteristics in the Three Gorges area during 1951-2006, ***Adv. Clim. Change Res***., 3(6), 368-372 (in Chinese with English abstract).
512. Linderholm, H. W., P. Jansson, **D. Chen**, 2007: A high-resolution reconstruction of Storglaciären mass balance back to 1781 using tree-ring data and circulation indices. ***Quaternary Research***, 67, 12-20, DOI: 10.1016/j.yqres.2006.08.005.
513. Miao, J.-F., **D. Chen**, K. Borne, 2007: Evaluation and comparison of Noah and Pleim-Xiu land surface models in MM5 using GÖTE2001 data: Spatial and temporal variations in near-surface air temperature. ***Journal of Applied Meteorology and Climatology***, 46, 1587-1605. DOI: 10.1175/JAM2561.1
514. Ostwald, M. E. Simelton, **D. Chen**, A. Liu, 2007: Relation between vegetation changes, climate variables and impact of land-use policy in Shaanxi Province, China. ***Geografiska Annaler***, 89A, 223-236. DOI: 10.1111/j.1468-0459.2007.00322.x
515. Zhang, S., E. Simelton, L. Lövdahl, **D. Chen**, 2007: Simulated long-term effects of different soil management regimes on the water balance in the Loess Plateau, China. ***Field Crops Research***, 100, 311-319. DOI: 10.1016/j.fcr.2006.08.006
516. Zhu, Y., **D. Chen**, W. Li and P. Zhang, 2007: Application of Lamb-Jenkinson object classification for atmospheric circulation in China. ***Journal of Nanjing Institute of Meteorology***, 30(3), 289-297 (in Chinese with English abstract).
517. Achberger, C., **D. Chen**, H. Alexandersson, 2006: The surface winds of Sweden during 1999-2000. ***International Journal of Climatology***, 26, 159-178. DOI: 10.1002/joc.1254
518. Benestad, R. **D. Chen**, 2006: The use of a Calculus-based Cyclone Identification method for generating storm statistics. ***Tellus*** A, 58, 473-486. DOI: 10.1111/j.1600-0870.2006.00191.x
519. **Chen, D**. C. Achberger, J. Räisänen, C. Hellström, 2006: Using statistical downscaling to quantify the GCM-related uncertainty in regional climate change scenarios: A case study of Swedish precipitation. ***Advances in Atmospheric Sciences***, 23, 54-60. DOI: 10.1007/s00376-006-0006-5
520. Ding Y., G. Ren, G. Shi, P. Gong, D. Zheng, P. Zai, D. Zhang, C. Zhao, S. Wang, H. Wang, Y. Luo, **D. Chen**, X. Gao, and X. Dai, 2006: National Assessment Report of Climate Change ( I ): Climate change in China and its future trend. ***Advances in Climate Change Research***, 2(1), 3-8 (in Chinese with English abstract).
521. Gao, G., **D. Chen**, G. Ren, Y. Chen, Y. Liao, 2006: Spatial and temporal variations and controlling factors of potential evapotranspiration in China: 1956-2000. ***Journal of Geographical Sciences***, 16 (1), 3-12. DOI: 10.1007/s11442-006-0101-7
522. Gao, G**. D. Chen**, G. Ren, Y. Chen, and Y. Liao, 2006: Trend of potential evapotranspiration over china during 1956 and 2000. ***Geographical Research***, 25(3), 378-387 (in Chinese with English abstract).
523. Gong, L., C-Y Xu, **D**. **Chen**, S. Halldin, 2006: Sensitivity of the Penman-Monteith reference evapotranspiration to key climatic variables in the Changjiang (Yangtze River) Basin. ***Journal of Hydrology***, 329, 620-629. DOI: 10.1016/j.jhydrol.2006.03.027

524. Ho, Ch.-H., J.-H. Kim, H.-S. Kim, J.-H. Jeong, **D. Chen**, 2006: Variation of Tropical Cyclone Activities in the South Indian Ocean: ENSO and MJO effects. ***Journal of Geophysical Research***, 111, D22101, DOI: 10.1029/2006JD007289.
525. Jeong, J.-H., B-M. Kim, C.-H. Ho, **D. Chen**, G-H. Lim, 2006: Stratospheric origin of cold surge occurrence in East Asia. ***Geophysical Research Letters***, 33, L14710, DOI: 10.1029/2006GL026607.
526. Jia, L., W. Li, **D. Chen**, X. An, 2006: A monthly atmospheric circulation classification and its relationship with climate in Haerbin, ***Acta Meteorologica Sinica***, 64(2), 236-245 (in Chinese with English abstract).
527. Jia, L., W. Li, **D. Chen**, 2006: Relationship Between Precipitation in Northeast China and the Atmospheric Circulation, ***Journal of Applied Meteorological Science***, 17(5), 557-566.
528. Jia, L., W. Li, **D. Chen**, X. An, 2006: A Monthly Atmospheric Circulation Classification and Its Relationship with Climate in Harbin. J. Meteor. Res., 20(4), 402-412.
529. Kim, J., C. Ho, M. Lee, J. Jeong, **D. Chen**, 2006: Large increase in heavy rainfall associated with tropical cyclone landfalls in Korea after the late 1970s. ***Geophysical Research Letters***, 33, L18706, DOI: 10.1029/2006GL027430.
530. Liao, Y., Pan, X., Zhnag, Q., **Chen, D**., 2006: Daily Precipitation Simulation and Its Application on Crop Production Climate Risk Analysis. ***ACTA AGRICULTURAE BOREALI-SINICA***, 21(S2): 206-212, DOI: 10.3321/j.issn:1000-7091.2006.z2.050.
531. Miao, J.-F., **D. Chen**, K. Wyser, 2006: Modelling Subgrid Scale Dry Deposition Velocity of O3 over the Swedish west coast with MM5-PX Model. ***Atmospheric Environment***, 40, 415-429. DOI: 10.1016/j.atmosenv.2005.09.057
532. Moberg, A., P.D. Jones, D. Lister, A. Walther, M. Brunet, J. Jacobeit, O. Saladie, J. Sigro, E. Aguilar, P. Della-Marta, J. Luterbacher, P. Yiou, L.V. Alexander, **D. Chen**, A.M.G. Klein Tank, H. Alexandersson, C. Almarza, I. Auer, M. Barriendos, M. Begert, H. Bergström, R. Böhm, J. Butler, J. Caesar, A. Drebs, D. Founda, F.-W. Gerstengarbe, M. Giusi, T. Jónsson, M. Maugeri, H. Österle, K. Pandzic, M. Petrakis, L. Srnec, R. Tolasz, H. Tuomenvirta, P.C. Werner, H. Linderholm, A. Philipp, H. Wanner, and E. Xoplaki, 2006: Indices for daily temperature and precipitation extremes in Europe analysed for the period 1901-2000. ***Journal of Geophysical Research***, 111, D22106, DOI: 10.1029/2006JD007103.
533. Mu, H., J. Xu, X. Ke, L. Tang, **D. Chen**, 2006: Application of high resolution numerical model to wind energy potential assessment, ***Journal of Applied Meteorological Science***, 17(2), 152-159 (in Chinese with English abstract).
534. Ostwald M. **D. Chen**, 2006: Land-use change: impacts of climate variations and policy among small-scale Farmers. ***Land Use Policy***, 23, 361-371. DOI: 10.1016/j.landusepol.2005.04.004
535. Shein, K.A., C. Oludhe, P. Ambenje, L. Ogallo, M.A. Bell and K. Kabidi, W.M. Thiaw, T. Gill, W.A. Landman, W.M. Thiaw and M.A. Bell, C. Kocot, D. Phillips, R. Whitewood, K.L. Gleason, M. Cortez Vázquez, E.K. Grover-Kopec, J.A. Marengo, R. Martnez, M. Bidegain, M. Rusticucci, O.N. Bulygina, N.N. Korshunova, V.N. Razuvaev, F. Ren, G. Gao, M. Rajeevan, K.R. Kumar, F. Rahimzadeh, M. Khoshkam, J.J. Kennedy, C. Achberger, **D. Chen**, R. Trigo, R. Garcia-Herrera, D. Paredes, A.B. Watkins, M.J. Salinger, M.J. Salinger, 2006: State of the Climate in 2005. ***Bulletin of American Meteorological Society***, 87, 1-102.
536. Song, Y., **D. Chen**, W. Dong, 2006: Influence of climate on winter wheat productivity in different climate regions of China during 1961-2000. ***Climate Research***, 32, 219-227.
537. Wetterhall, F., A. Bárdossy, **D. Chen**, S. Halldin, C.-Y. Xu, 2006: Daily precipitation-downscaling techniques in three Chinese regions. ***Water Resources Research***, 42, W11423, DOI: 10.1029/2005WR004573.
538. Xu, C-Y, L. Gong, T. Jiang, **D. Chen**, 2006: Decreasing reference evapotranspiration in a warming climate – a case of Changjiang (Yangtze River) catchment during 1970-2000. ***Advances in Atmospheric Sciences***, 23, 513-520. DOI: 10.1007/s00376-006-0513-4
539. Xu, C-Y, L. Gong, T. Jiang, **D. Chen**, V. P. Singh, 2006: Analysis of spatial distribution and temporal trend of reference evapotranspiration in Changjiang catchment. ***Journal of Hydrology***, 327, 81-93. DOI: 10.1016/j.jhydrol.2005.11.029

540. **Chen, D.**, G. Gao, C.-Y. Xu, J. Guo, G. Ren, 2005: Comparison of Thornthwaite method and Pan data with the standard Penman-Monteith estimates of potential evapotranspiration for China. ***Climate Research***, 28, 123-132. DOI: 10.3354/cr028123
541. **Chen, D.** A. Omstedt, 2005: Climate-induced variability of sea level in Stockholm: Influence of air temperature and atmospheric circulation. ***Advances in Atmospheric Sciences***, 22 (5), 655-664. DOI: 10.1007/BF02918709
542. Fan, L., C. Fu, and **D. Chen**, 2005: Review on creating future climate change scenarios by statistical downscaling techniques. ***Advance in Earth Sciences***, 20(3), 320-329 (in Chinese with English abstract).
543. Hageback, J., J. Sundberg, M. Ostwald, **D. Chen**, Y. Xie, P. Knutsson, 2005: Climate variations and land use in Danangou watershed, China - Examples of small-scale farmers' adaptation. ***Climatic Change***, 72, 189-212. DOI: 10.3354/cr029255.
544. Hanssen-Bauer, I., C. Achberger, R. Benestad**, D. Chen**, E. Førland, 2005: Statistical downscaling of climate scenarios over Scandinavia. ***Climate Research***, 29, 255-268, DOI: 10.3354/cr029255.
545. Johansson, B., **D. Chen**, 2005: Estimation of areal precipitation for runoff modelling using wind data: A case study in Sweden. ***Climate Research***, 29, 53-61. DOI: 10.3354/cr029053.
546. Linderholm, H. W., **D. Chen,** 2005: Central Scandinavian winter precipitation variability during the past five centuries reconstructed from Pinus sylvestris tree rings. ***Boreas***, 34, 43-52, DOI: 10.1080/03009480510.
547. Song, Y. E. Simelton, **D. Chen**, W. Dong, 2005: Influence of climate change on winter wheat in north China during 1950-2000. ***Acta Meteorologica Sinica***, 19, 501-510.
548. Wang, X. G. Carmichael, **D. Chen**, Y. Tang, T. Wang, 2005: Impacts of different emission sources on air quality during March 2001 in the Pearl River Delta (PRD) region. ***Atmospheric Environment***. 39, 5227-5241. DOI: 10.1016/j.atmosenv.2005.04.035
549. Xu, C.-Y., **D. Chen**, 2005: Comparison of seven models for estimation of evapotranspiration and groundwater recharge using lysimeter measurement data in Germany. ***Hydrological Processes***, 19, 3117-3734. DOI: 10.1002/hyp.5853
550. **Chen, D.** G. Gao, 2004: Impact of climate change on runoffs from Han Jiang and Gan Jiang in the Yangtze River basin, in '***Climate Change and Yangtze Floods'***. ed. T. Jiang et al. Science Press, Beijing, China, 132-142.
551. **Chen, D.** X. Li, 2004: Scale dependent relationship between maximum ice extent in the Baltic Sea and atmospheric circulation. ***Global and Planetary Change***, 41, 275-283.
552. **Chen, D.**, S. Å. Wängberg, A.Wulff, K. Borne, 2004: Attenuation of biologically effective UV doses under overcast skies: a case study from the eastern Atlantic sector of the Southern Ocean. ***Deep Sea Research Part II: Topical Studies in Oceanography***, 51, 2673-2682.
553. Liao Y., Q. Zhang, **D. Chen**, 2004: Stochastic modeling of daily precipitation in China. ***Journal of Geographical Sciences***, 14(4), 417-426. DOI: 10.1007/BF02837485.
554. Liao, Y., Q. Zhang, and **D. Chen**, 2004: Precipitation simulation in China with a Weather Generator, ***Acta Geographica Sinica***, 59(5), 689-698 (in Chinese with English abstract).
555. Linderson, M.-L., C. Achberger, D. Chen, 2004: Statistical downscaling and scenario construction of precipitation in Scania, southern Sweden. Nordic Hydrology, 35, 261-278. DOI: 10.2166/nh.2004.0019.
556. Qian, W.-H., **D. Chen**, Q. Lin, and W.-M. Qin, 2004: Regional temperature and precipitation trend under global change. ***Climate Change Newsletter***, 3, 7-8 (in Chinese).
557. Achberger, C., M.-L. Linderson, **D. Chen**, 2003: Performance of the Rossby Centre regional Atmospheric model in Southern Sweden: comparison of simulated and observed. ***Theoretical and applied Climatology***, 76, 219-234. DOI: 10.1007/s00704-003-0015-6.
558. Blenckner, T., **D. Chen**, 2003: Comparison of the impact of regional and north-atlantic atmospheric circulation on an aquatic ecosystem. ***Climate Research***, 23, 131-136. DOI: 10.3354/cr023131.
559. **Chen, D.**, Y. Chen, 2003: Association between winter temperature in China and upper air circulation over East Asia revealed by Canonical Correlation Analysis. ***Global and Planetary Change***, 37, 315-325. DOI: 10.1016/S0921-8181(02)00206-0.
560. **Chen, D.** and G. Gao, 2003. Impact of climate change on runoffs from Han Jiang and Gan Jiang in the Yangtze River basin. ***Journal of Lake Sciences***, 15, 105-114 (in Chinese with English abstract).

561. Hellström, C., **D. Chen**, 2003: Statistical downscaling based on dynamically downscaled predictors: Application to monthly precipitation in Sweden, ***Advances in Atmospheric Sciences***, 20, 951-958. DOI: 10.1007/BF02915518.
562. Johansson, B. **D. Chen**, 2003: The influence of wind and topography on precipitation distribution in Sweden: statistical analysis and modelling. ***International Journal of Climatology***, 23, 1523-1535. DOI: 10.1002/joc.951.
563. Qian, W.-H., **D. Chen**, Y. Zhu, H.-Y. Shen, 2003: Temporal and Spatial Variability of Dryness/Wetness in China during the Last 530 Years. ***Theoretical and applied Climatology***, 76, 13-29. DOI: 10.1007/s00704-003-0009-4.
564. Eriksson, P., **D. Chen**, 2002: Statistical parameters derived from ozonesonde data of importance for passive remote sensing observations of ozone. ***Int. J. Remote Sensing***, 23, 4945-4963.
565. Busuioc, A., **D. Chen**, C. Hellström, 2001: Performance of statistical downscaling models in GCM validation and regional climate change estimates: Application for Swedish precipitation. ***International Journal of Climatology***, 21, 557-578. DOI: 10.1002/joc.624.
566. Busuioc, A., **D. Chen**, C. Hellström, 2001: Temporal and spatial variability of precipitation in Sweden and its link with the large scale atmospheric circulation. ***Tellus***, 53A, 348-367. DOI: 10.1034/j.1600-0870.2001.01152.x.
567. Hellström, C., **D. Chen**, Ch. Achberger, J. Räisänen, 2001: A comparison of climate change scenarios for Sweden based on statistical and dynamical downscaling of monthly precipitation. ***Climate Research***, 19, 45-55. DOI: 10.3354/cr019045.
568. Omstedt, A., **D. Chen**, 2001: Influence of atmospheric circulation on the maximum ice extent in the Baltic Sea. ***Journal of Geophysical Research***, 106, 4493-4500. DOI: 10.1029/1999JC000173.
569. **Chen, D.**, 2000: A monthly circulation climatology for Sweden and its application to a winter temperature case study. ***International Journal of Climatology***, 20, 1067-1076. DOI: 10.1002/1097-0088(200008)20:10<1067::AID-JOC528>3.0.CO;2-Q.
570. **Chen, D.**, T. Gustavsson, J. Bogren, 1999: The applicability of similarity theory to a road surface. ***Meteorological Applications***, 6, 81-88. DOI: 10.1017/S1350482799001036.
571. **Chen, D.**, C. Hellström, 1999: The influence of the North Atlantic Oscillation on the regional temperature variability in Sweden: spatial and temporal variations. ***Tellus A***, 51, 505-516, DOI: 10.1034/j.1600-0870.1999.t01-4-00004.x.
572. Lindkvist, L., **D. Chen**, 1999: Air and soil frost indices in relation to plant mortality in elevated complex clear-felled terrain. ***Climate Research***, 12, 65-75. DOI: 10.3354/cr012065
573. Upmanis, H., **D. Chen**, 1999: Influence of geographical factors and meteorological variables on nocturnal urban-park temperature differences - a case study of summer 1995 in Goteborg, Sweden**.** ***Climate Research***, 13, 125-139, DOI: 10.3354/cr013125.
574. Borne, K., **D. Chen**, M. Nunez, 1998: A method for finding sea breeze days under stable synoptic conditions and its application to the Swedish wets coast. ***International Journal of Climatology***, 18, 901-914. DOI: 10.1002/(SICI)1097-0088(19980630)18:8<901::AID-JOC295>3.0.CO;2 -F.
575. **Chen, D.**, M. Nunez, 1998: Temporal and spatial variability of total ozone in southwest Sweden revealed by two ground-based instruments. ***International Journal of Climatology***, 18, 1237-1246.
576. Malmgren, B. A., A. Winter, **D. Chen**, 1998: El Nino southern oscillation and North Atlantic oscillation control of climate in Puerto Rico. ***Journal of Climate***, 11, 2713-2717, DOI: 10.1175/1520-0442(1998)011<2713:ENOSOA>2.0.CO;2
577. Nunez, M., **D. Chen**, 1998: A Comparison of cloudless sky erythemal ultraviolet radiation at two sites in southwest Sweden. ***International Journal of Climatology***, 18, 915-930. DOI: 10.1002/(SICI)1097-0088(19980630)18:8<915::AID-JOC283>3.0.CO;2-9.
578. Tengberg, A., **D. Chen**, 1998: A comparative analysis of Nebkhas in central Tunisia and northern Burkina Faso. ***Geomorphology***, 22, 181-192. DOI: 10.1016/S0169-555X(97)00068-8.
579. **Chen, D.**, J. Kling, 1996: Apparent thermal diffusivity in soil: Estimation from thermal records and suggestions for numerical modeling. ***Physical Geography***, 17, 419-430.
580. Franzen, L. G., **D. Chen**, L. F. Klinger, 1996: Principles for a climate regulation mechanism during the late Phanerozoic era, based on carbon fixation in peatforming wetlands. ***Ambio***, 25, 435-442.

581. Lohmann, G., R. Gerdes, **D. Chen**, 1996: Stability of the thermohaline circulation in a simple coupled model. ***Tellus***, 48A, 465-477. DOI: 10.1034/j.1600-0870.1996.t01-2-00008.x.
582. Lohmann, G., R. Gerdes, **D. Chen**, 1996: Sensitivity of the thermohaline circulation in coupled oceanic GCM-atmospheric EBM experiments. ***Climate Dynamics***, 12, 403-416. DOI: 10.1007/BF00211686.
583. **Chen, D.**, 1995: A residual circulation derived from an energy balance climate model. ***Journal of Geophysical Research***, 100, 21137-21145. DOI: 10.1029/95JD02033.
584. **Chen, D.**, R. Gerdes, G. Lohmann, 1995: A 1-D Atmospheric energy balance model developed for ocean modeling. ***Theoretical and Applied Climatology***, 51, 25-38.
585. Franzen, L. G., **D. Chen**, 1995: Torvmarker som klimatregulatorer under fanerozoikum. ***Svensk Geografisk Årsbok 1995***, 42-57.
586. Gong, R., G. Du, and **D. Chen**, 1986: The field-water budget of main crops in the Huang-Huai-Hai Plain, ***Geography and Land Research***, 2(1), 33-59 (in Chinese with English abstract).
587. Zuo, D., Y. Xu, and **D. Chen**, 1985： An analysis of field-water budget of the main crops on the low plain in Hebei province, ***Geographical Research***, 4(1), 22-29 (in Chinese with English abstract).

**Books or book chapters**

1. **Chen, D.** and H.-W. Lai**,** 2023: Water and Climate Change. In ***Routledge Handbook of Water and Development*** [Hellberg, S., F. Söderbaum, A. Swain, J. Öjendal (eds.)]. Routledge, London, United Kingdom, DOI: 10.4324/9781003095545-28.
2. **Chen, D.,** M. Rojas, B.H. Samset, K. Cobb, A. Diongue Niang, P. Edwards, S. Emori, S.H. Faria, E. Hawkins, P. Hope, P. Huybrechts, M. Meinshausen, S.K. Mustafa, G.-K. Plattner, and A.-M. Tréguier, 2021: Framing, Context, and Methods. In ***Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*** [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 147–286, doi:10.1017/9781009157896.003.
3. **Chen, D.**, M. Rojas, B.H. Samset, K. Cobb, A. Diongue Niang, P. Edwards, S. Emori, S.H. Faria, E. Hawkins, P. Hope, P. Huybrechts, M. Meinshausen, S.K. Mustafa, G.-K. Plattner, and A.-M. Tréguier, 2021: Framing, Context, and Methods Supplementary Material. In ***Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*** [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Available from https://www.ipcc.ch/
4. **Chen, D**., A. Walther, A. Moberg, P.D. Jones, J. Jacobeit, and D. Lister, 2015: European Trend Atlas of Extreme Temperature and Precipitation. *Springer,* Dordrecht Heidelberg New York London, DOI 10.1007/978-94-017-9312-4, pp 178.
5. Cubasch, U., D. Wuebbles, **D. Chen**, M.C. Facchini, D. Frame, N. Mahowald and J.-G. Winther, 2013: Introduction. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 119–158, DOI:10.1017/CBO9781107415324.007.
6. Benestad, R. E., I. Hanssen-Bauer, and **D. Chen**, 2008: ***Empirical-Statistical Downscaling***, World Scientific Publishing Co. Pte. Ltd., Singapore, pp 300.
7. Graham, L.P., **D. Chen**, O. B. Christensen, E. Kjellström, V. Krysanova, H.E.M. Meier, M. Radziejewski, J. Räisänen, B. Rockel, and K. Ruosteenoja, 2008: Chapter 3 of The BALTEX Assessment of Climate Change for the Baltic Sea basin: Projections of Future Anthropogenic Climate Change. Springer, Berlin, Germany, 133-220.
8. Heino, R. H. Tuomenvirta, B. Gustafsson, V. Vuglinsky, H. Alexandersson, L. Bärring, A. Briede, **D. Chen**, M. Falarz, E. Førland, J. Haapala, J. Jaagus, L. Kitaev, A. Kont, E. Kuusisto, G. Lindström, M.

Meier, M. Mietus, A. Moberg, K. Myrberg, T. Niedzwiedz, Ø. Nordli, A. Omstedt, K. Orviku, Z. Pruszak, E. Rimkus, V. Russak, C. Schrum, Ü. Suursaar, T. Vihma, and J. Wibig, 2008: Chapter 2 of The BALTEX Assessment of Climate Change for the Baltic Sea basin: Detection of past and current climate change. Springer, Berlin, Germany, 35-132.

9. Ostwald, M. and **D. Chen**, 2008: Land-use and Climate Change in China with a focus on Shaanxi province in the Chinese Loess Plateau - Lesson for Future Climate Politics, in "Global Warming and Climate Change, Ten Years after Kyoto and Still Counting ". Ed. Velma Grover, Science Publishers, Enfield, New Hampshire 03478, USA, 999-1012.
10. Xu, C.-Y., V. P. Singh, Y. D. Chen and **D. Chen**, 2008: Chapter 6: Evaporation and Evapotranspiration. In "Hydrology and Hydraulics", ed. by Singh, V.P., Water Resources Publications, L.L.C., Colorado, pp.229-276.
11. Li, W., **D. Chen**, Z. Zhao, Z. Lin, P. Zhang, Q. Li, X. Shi, and C. Sun, 2007: Chapter 9: Seasonal to Interannual Climate Prediction, in "Climate of China". Eds. S. Wang and W. Li, China Meteorological Press, Beijing, 288-322.
12. Kattsov, V. M., E. Källén, H. Cattle, J. Christensen, H. Drange, I. Hanssen-Bauer, T. Jóhannesen, I. Karol, J. Räisänen, G. Svensson, S. Vavulin, and **D. Chen**, I. Polyakov, A. Rinke, 2005: Chapter 4 of The Arctic Climate Impact Assessment-Future Climate Change: Modeling and Scenarios for the Arctic. Cambridge University Press, Cambridge, UK, 99-150.
13. McBean, G., G. Alekseev, **D. Chen**, E. Forland, J. Fyfe, P. Y. Groisman, R. King., H. Melling, R. Vose, and P. H. Whitfield, 2005: Chapter 2 of The Arctic Climate Impact Assessment-Future Climate Change: Arctic Climate- Past and Present. Cambridge University Press, Cambridge, UK, 21-60.
14. **Chen, D.** and G. Gao, 2004: Impact of climate change on runoffs from Han Jiang and Gan Jiang in the Yangtze River basin, in 'Climate Change and Yangtze Floods'. ed. T. Jiang et al. Science Press, Beijing, China, 132-142.
15. **Chen, D.** and K. Wyser, 2004: Meteorological and Climatological Aspects of Otto Nordenskjöld's Antarctic Expedition, in 'Antarctic Challenges. Historical and Current Perspectives on Otto Nordenskjöld's Antarctic Expedition 1901-1903'. Ed. by A. Elzinga, T. Nordin, D. Turner and U. Wränberg, Royal Society of Arts and Sciences, Göteborg, 209-221.
16. Giorgi, F., B. Hewitson, Christensen, J., M. Hulme, H. Von Storch, P. Whetton, R. Jones, L. Mearns, C. Fu, R. Arritt, B. Bates, R. Benestad, G. Boer, A. Buishand, M. Castro, **D. Chen**, W. Cramer, R. Crane, J. F. Crossley, M. Dehn, K. Dethloff, J. Dippner, S. Emori, R. Francisco, J. Fyfe, F.W. Gerstengarbe, W. Gutowski, D. Gyalistras, I. Hanssen-Bauer, M. Hantel, D.C. Hassell, D. Heimann, C. Jack, J. Jacobeit, H. Kato, R. Katz, F. Kauker, T. Knutson, M. Lal, C. Landsea, R. Laprise, L.R. Leung, A.H. Lynch, W. May, J.L. McGregor, N.L. Miller, J. Murphy, J. Ribalaygua, A. Rinke, M. Rummukainen, F. Semazzi, K. Walsh, P. Werner, M. Widmann, R. Wilby, M. Wild, Y. Xue, M. Mietus, and J. Zillman, 2001: Chapter 10 of the IPCC TAR (Climate Change 2001: The Scientific Basis): Regional Climate Information – Evaluation and Projections. Cambridge University Press, Cambridge, UK, 584-638.
17. Hong, J. and **D. Chen**, 1991: Estimating the distribution of water surface evaporation, In 'Evapotranspiration at Field Conditions--Measurement and Estimation', Ed. X. Xie et al, 171-181, Meteorological Press, Beijing, China (in Chinese with English abstract).

## Selected reports and conference proceeding papers since 1995

1. United Nations Environment Programme, 2022: A Scientific Assessment of the Third Pole Environment. Edited by Yao T., L. G. Thompson, **D. Chen**, N. Chettri. https://wedocs.unep.org/20.500.11822/39757.
2. Yao, T., L. Thompson, **D. Chen**, Y. Zhang, N. Wang, L. Zhao, T. Che, B. Xu, G. Wu, F. Zhang, Q. Tang, W. Immerzeel, T. Bolch, F. Pellicciotti, X. Li, W. Yang, J. Gao and W. Wang, 2020: Third Pole climate warming and cryosphere system changes. Bulletin nº, Vol 69 (1). WMO, Geneva.
3. AZORIN-MOLINA, C., J. ASIN, T.R. McVICAR, L. MINOLA, G. ZHANG, A. CHEN, J.I. LOPEZ-MORENO, S.M. VICENTE-SERRANO, **D. CHEN**, 2018: Evaluación del desgaste de los anemómetros: aproximación estadística para corregir errores en la velocidad del viento. In Montávez-

Gómez J.P. et al. (Eds.), El clima: aire, agua, tierra y fuego. Universidad de Murcia, Cartagena (Spain), Spanish Climatological Society (AEC), ISBN 978-84-7837-098-6, pp. 65-74.

4. AZORIN-MOLINA, C., M. MENENDEZ, T.R. McVICAR, S. ACEVEDO, S.M. VICENTE-SERRANO, E. CUEVAS, L. MINOLA, G. ZHANG, A. CHEN, **D. CHEN**, 2018: Tendencias de la velocidad del viento en Canarias, 1948-2014. In Montávez-Gómez J.P. et al. (Eds.), El clima: aire, agua, tierra y fuego. Universidad de Murcia, Cartagena (Spain), Spanish Climatological Society (AEC), ISBN 978-84-7837-098-6.
5. Azorin-Molina, C., J.A. Guijarro, T.R. McVicar, S.M. Vicente-Serrano, L. Minola, **D. Chen**, S. Jerez, F. Espirito Santo, F., 2016: Tendencias de las rachas máximas diarias de velocidad del viento en España y Portugal. In Olcina Cantos, Jorge; Rico Amorós, Antonio M.; Moltó Mantero, Enrique (eds.). Clima, sociedad, riesgos y ordenación del territorio. Universidad de Alicante, Alicante (Spain), Asociación Española de Climatología. ISBN 978-84-16724-19-2, pp. 37-46 (In Spanish with English abstract).
6. Azorin-Molina, C., S. M. Vicente-Serrano, T.R. McVicar, L. Minola, **D. Chen**, J. Revuelto, J.I. Lopez-Moreno, 2016: Evaluación del impacto del intervalo de medida en el cálculo de la media y tendencias de la velocidad del viento bajo el fenómeno del "stilling". In Olcina Cantos, Jorge; Rico Amorós, Antonio M.; Moltó Mantero, Enrique (eds.). Clima, sociedad, riesgos y ordenación del territorio. Universidad de Alicante, Alicante (Spain), Asociación Española de Climatología. ISBN 978-84-16724-19-2, pp. 47-56 (In Spanish with English abstract).
7. **Chen D.,** et al., 2016: Nederbörd och översvämningar i framtidens Sverige, Myndigheten för samhällsskydd och beredskap, Karlstad, (www.msb.se), Publikationsnummer MSB 973- februari 2016, ISBN 978-91-7383-641-8, pp 79.
8. Azorin-molina, C., S.M. Vicente-serrano, **D. Chen**, B.H. Connell, M.A. Domínguez-Durán, J. Revuelto, J.I. López-Moreno, 2014: Climatología sinóptica de la nubosidad a partir de datos AVHRR en la Península Ibérica y Baleares durante el semestre cálido Mayo-Octubre (1997-2011). In F. Rodrigo et al. (Eds.), Cambio climático y cambio global, Spanish Climatological Society (AEC), Almeria, 9, 77-88.
9. Zetterberg L. and **D. Chen**, 2011: The time aspect of bioenergy – climate impacts of bioenergy due to differences in carbon uptake rates, ***IVL (Swedish Environmental Research Institute) report*** B-1989, pp 38.
10. **Chen, D**. C. Achberger, U. Postgård, A. Walther, Y. Liao, T. Ou, 2008: Using a weather generator to create future daily precipitation scenarios for Sweden, ***Research Report*** C76, Earth Sciences Centre, University of Gothenburg, Gothenburg, Sweden, 82 pp.
11. Christensen, J.H., T. Iversen, C. Jones, H. Järvinen, M. Rummukainen,A. Ahlstrøm, B. Ådlandsvik, L. Bärring, C. Beier, T. Berntsen, H. Björnsson, J. Brandt, **D. Chen**, H. Drange, K. Edelvang, E. Førland, H.-C. Hansson, C. Heinze, K. Holmén, Ø. Hov, E. Jansen, T. Jóhanneson, E. Kaas, E. Källén, L. Klemedtsson, J.E. Kristjansson, N.G. Kvamstø, W. Lahoz, A. Laaksonen, J. Langner, G. Leeuw, K. Lehtinen, A. Lindroth, J.E. Olesen, H. Olafsson, A. Omstedt, J.C. Refsgaard, A. Rutgersson, B. Smith, Á. Snorrason, A. Stigebrandt, J. Strömqvist, A. Stohl, F. Stordal, G. Svensson, M. Tjernström, P. Tunved, 2008: Earth System interactions: enhancing capabilities for the
prediction of global, regional and local climate change - a Nordic window of opportunity (A white paper on a proposed Nordic network in Climate and Earth System Modelling), pp 14.
12. Haeger-Eugensson, M., L. Tang, **D. Chen**, J. Axelsson, A. Lönnermark, H. Stripple, 2008: Spridning av föroreningar till luft från brander, ***IVL (Swedish Environmental Research Institut) Report*** B-1702, pp 68.
13. Eriksson, C.D., A. Omstedt, A., **D. Chen**, et al., 2007: Reconstruction of river runoff to the Baltic Sea for the period 1500-1995. ***GEWEX Newsletter***. 17 (3).
14. Achberger, C. and **D. Chen**, 2006: Trend of extreme precipitation in Sweden and Norway during 1961-2004. ***Research Report*** C72, ISSN 1400-383X, Earth Sciences Centre, Göteborg University, Gothenburg, Sweden, 58 pp.
15. **Chen, D**. and A. Walther, Moberg, A., P.D. Jones, J. Jacobeit, D. Lister, 2006: Trend atlas of the EMULATE indices. ***Research Report*** C73, Earth Sciences Centre, Göteborg University, Gothenburg, Sweden, 797 pp.

16. Galle, Bo; U. Platt, C. Oppenheimer, M. Millan, L. Alonso, **D. Chen**, 2006: Development of Optical Remote Sensing Instruments for Volcanological Applications -results from the EU-project DORSIVA. Cities on Volcanoes IV, Quito, 23-27.
17. Galle, B., L. Alonso, **D. Chen**, M. Millan, C. Oppenheimer, and U. Platt, 2005: Development of optical remote sensing instruments for volcanological applications: -results from the EU-project DORSIVA, Geophysical Research Abstracts, Vol. 7, 07819, 2005 SRef-ID: 1607-7962/gra/EGU05-A-07819. European Geosciences Union 2005.
18. Borne, K., **D. Chen**, J.-F. Miao, C. Achberger, J. Lindgren, M. Hallqvist, J. Pettersson, M. Haeger-Eugensson, I. Eliasson, K. Wyser, J. Langner, 2005. Data report on measurements of meteorological- and air pollution variables during the campaign GÖTE-2001. Research Report C67, 28 pp., Earth Science Centre, Göteborg University, Gothenburg, Sweden.
19. Linderholm, H., A. Walther, and **D. Chen**, 2005: Trend of growing season length over the great Baltic area. ***Research Report*** C69, Earth Sciences Centre, Gothenburg University, Gothenburg, Sweden, 88 pp.
20. Karlsson, P.-E., H. Pleijel, M.-H. Eugensson, **D. Chen**, L. Tang, 2004: Lokal variation av ozonexponering i jordbruks- och skogslandskap i Sverige, ***IVL (****Swedish Environmental Research Institute****) Report***, pp 48.
21. Ostwald, M., **D. Chen**, Y. Xie, P. Knutsson, S. Brogaard, K. Borne, and Y. Chen, 2004: Impact of climate change and variability on local-scale land use – Shaanxi Province, China. ***Research Report Earth Science Centre Series*** C61, Göteborg University.
22. Wyser, K. and **D. Chen**, 2004: Airplane emission, ice clouds, and the regional climate of Sweden, Proceedings of the International Symposium on Climate Change (ISCC) (Beijing, China, 31 March -3 April 2003). **WMO/TD-No.1172**, 100-103.
23. **Chen, D**. and B. Johansson, 2003: Temperaturens höjdberoende - En studie i Indalsälvens avrinningsområde (Temperature's dependency on height: a study in Indalsälvens drainage area), ***Serie Hydrologi*** (***The series of Hydrology),*** SMHI (Swedish Meteorological and Hydrological Institute), 88, pp 34.
24. Eugensson, M., K. Borne, **D. Chen**, K. Persson1, 2003: Development of New Meteorological Ventilation index for urban air quality studies, ***IVL (****Swedish Environmental Research Institute****) Report*** 02/70, pp 20.
25. **Chen, D**., T. Wang, M. Eugensson, C. Achberger, K. Borne, 2002: Application of TAPM (v.1) in Swedish West Coast: validation during 1999-2000. ***IVL (****Swedish Environmental Research Institute****) Report*** B2164, pp 35.
26. **Chen, D**. and W. Qian, 2000: Precipitation record in China, ***Polarfront***, No. 105.
27. Busuioc, A., **D. Chen**, and C. Hellström, 1999: Temporal and spatial variability of precipitation in Sweden over the 1890-1990 interval, ***Report C19***, Earth Sciences Centre, University of Gothenburg, Sweden, 46 pp.
***28.*** Busuioc, A. and **D. Chen**, 1999: Performance of statistical downscaling models in GCM validation and regional climate change estimates: Application for Swedish precipitation, Presentation at the ***Conference on Detection and modeling of regional climate change***, Trieste, Italy, 9-12 June, 1999.
29. **Chen, D.** And Y. Chen, 1999: Development and verification of a multiple regression downscaling model for monthly temperature in Sweden, in 'Preliminary analysis and statistical downscaling of monthly temperature in Sweden', Chen et al., ***Report C16***, Earth Sciences Centre, University of Gothenburg, Sweden, 41-55.
30. Nunez, M., **D. Chen**, G. Hayden, O. Larko, C. Kuchinke, and B. Nezic, 1997: A Regional Study of Ultraviolet Radiation in the Göteborg/Koster Area of Southwest Sweden, ***A Report to the Swedish Radiation Protection Institute (SSI),*** SSI, Stockholm, pp 55.
31. Nunez, M. and **D. Chen**, 1997: A Comparison of urban/rural erythermal UV irradiances for Göteborg, Sweden, presented in EGS conference in Vienna, April, 1997.
32. **Chen, D.** and J. Kling, 1996: On the apparent thermal diffusivity and its usefulness as an indicator for non-conductive processes in soil, Biometeorology 14, Part 2 (Volume 2), Ed. A. Hocevar et al., (**Proceedings of the 14th International Congress of Biometeorology, September 1-8, 1996)**, Ljubljana, Slovenia, 10-17.
33. **Chen, D.** and W. Qu, 1996: Estimating the canopy resistance from standard and remotely sensed data, in'***Environment and Biometeorology***: ***The Proceedings of International Symposium on Environment***

***and Biometeorology July 20-22, 1995, Beijing, China'***, Ed. Qian Ping, China Agricultural Scientech Press, Beijing, 285-293.

34. Lohmann, G., R. Gerdes, and **D. Chen**, 1996: Feedback mechanisms affecting the thermohaline circulation, ***Proceedings of the ACSYS Conference on the Dynamics of the Arctic Climate System*** (Gothenburg, Sweden, 7-10 November 1994), WCRP, WMO/TD-No. 420-424.
35. Franzen, L. G. and **D. Chen**, 1995: Peat forming wetland and the quaternary palaeo-climate, ***Terra Nostra*** (Abstracts of the International Union for Quaternary Research XIV International Congress, August 3-10, 1995, Berlin, Vol. 2, p. 84.
36. Lohmann, G., R. Gerdes, and **D. Chen**, 1995: Sensitivity of the thermohaline circulation in coupled oceanic GCM-atmospheric EBM experiments, ***Bericht aus dem Fachbereich Physik* 57**, AWI, Bremerhaven, Germany, pp 68.
37. Lohmann, G., R. Gerdes, and **D. Chen**, 1995: Stability of the thermohaline circulation in an analytical investigation, ***Bericht aus dem Fachbereich Physik* 58**, AWI, Bremerhaven, Germany, pp 28.