

# SHUCHANG LIU

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## EDUCATION

<b>ETH Zürich</b>	Zürich, Switzerland
PhD candidate in Atmospheric and Climate Science	Oct. 2020 - present
<b>Tsinghua University</b>	Beijing, China
M.S. Environmental Sciences and Engineering; outstanding graduate	June 2020
<b>Nanjing University</b>	Nanjing, China
B.S. Environmental Engineering; outstanding graduate	July 2017

## SELECTED PUBLICATIONS

**Liu, S.**, Zeman, C., & Schär, C. Understanding the double-ITCZ problem over the Atlantic with bias-corrected downscaling. In preparation.

**Liu, S.**, Zeman, C., Sørland, S. L., & Schär, C. (2022). Systematic Calibration of a Convection-Resolving Model: Application over Tropical Atlantic. *Journal of Geophysical Research: Atmospheres*, e2022JD037303.

**Liu, S.**, Xing, J., Wang, S., Ding, D., Cui, Y., & Hao, J. (2021). Health benefits of emission reduction under 1.5°C pathways far outweigh climate-related variations in China. *Environmental Science & Technology*, 55(16), 10957-10966.

**Liu, S.**, Xing, J., Wang, S., Ding, D., Chen, L., Hao, J. (2020). Revealing the impacts of transboundary pollution on PM<sub>2.5</sub>-related deaths in China. *Environment International*, 134, 105323.

Wang, S., **Liu, S.** (2019). Air pollution and lung cancer risks. In: Nriagu, J.O. (Ed.), *Encyclopaedia of environmental health, 2nd Edition*. Elsevier Science.

## RESEARCH EXPERIENCE

<b>ETH Zürich</b>	Zürich, Switzerland
PhD candidate	Oct. 2020 - present
<ul style="list-style-type: none"><li>Exploit the potential of high-resolution climate models in the tropics to constrain climate-change uncertainties</li></ul>	
<b>Tsinghua University</b>	Beijing, China
Master's Researcher	Sep. 2017 - June 2020
<ul style="list-style-type: none"><li>Investigated the impact of climate mitigation pathways on the heatwave and air pollution-related human health in China (master's thesis)</li></ul>	

## CONFERENCE PRESENTATIONS

<b>European Geophysical Union Meeting</b>	Vienna, Austria
Oral presentation	April 2023
<ul style="list-style-type: none"><li>Understanding the double-ITCZ problem over the Atlantic with bias-corrected downscaling</li></ul>	
<b>European Geophysical Union Meeting</b>	Vienna, Austria
Oral presentation	May 2022
<ul style="list-style-type: none"><li>Systematic Calibration of A Convection-Resolving Model: Application over Tropical Atlantic</li></ul>	

## TEACHING EXPERIENCES

**Bachelor's Courses**

Risk analysis of environmental health

Tsinghua University

Numerical method in environmental physics, Environmental Systems, Python in Geosciences

ETH Zürich

**Master's Courses**

Numerical modeling of weather and climate models

ETH Zürich

**Bachelor's Thesis**

Visualisation of simulated clouds over the Atlantic

ETH Zürich

**Master's Thesis**

Extreme Heat Waves Over the Persian Gulf

ETH Zürich