

Jiale Lou

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 https://www.researchgate.net/profile/Jiale_Lou

Education

- Feb.2017-Sep.2020** Enrolled in Doctor of philosophy (Ph.D. in Quantitative Marine Science)
University of Tasmania, Hobart, Australia
Thesis title: **South Pacific Ocean Climate Dynamics and Predictability**
Supervisors: Prof. Neil J. Holbrook; Prof. Terence J. O’Kane
- Sep.2013-Jun.2016** M. Sc. in Global Environment Change (Climate Science)
Beijing Normal University (BNU), Beijing, China.
Thesis title: A Decadal Variance Decomposition Method and Its
Application to the NH Atmospheric General Circulation of CCSM4LM
Simulation
Supervisor: Prof. Xiaogu Zheng
- Sep.2009-Jun.2013** B. Sc. in Atmospheric Science (Climate Science)
Nanjing University of Information Science & Technology (NUIST),
Nanjing, China.
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Research Interest

Climate Variability; Predictability; Climate Dynamics; Climate Modes of Variability; Statistical Analysis; Linear Inverse Modelling

Publications

- Lou, J.**, T. J. O’Kane and N. J. Holbrook, 2021: A Linear Inverse Model of Tropical and South Pacific Climate Variability: Optimal Structure and Stochastic Forcing. *J. Climate*, **34**, 143-155.
- Lou, J.**, T. J. O’Kane and N. J. Holbrook, 2020: A Linear Inverse Model of Tropical and South Pacific Seasonal Predictability. *J. Climate*. **33**, 4537-4554. doi:10.1175/jcli-d-19-0548.1
- Lou, J.**, N. J. Holbrook, and T. J. O’Kane, 2019: South Pacific Decadal Climate Variability and Potential Predictability. *J. Climate*, **32**, 6051-6069.
- Lou, J.**, X. Zheng, C. S. Frederiksen, H. Liu, S. Grainger, and K. Ying, 2016: Simulated decadal modes of the NH atmospheric circulation arising from intra-decadal variability, external forcing and slow-decadal climate processes. *Climate Dyn.*, **48**, 2635–2652.
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Ying, K., C. S. Frederiksen, X. Zheng, **J. Lou**, and T. Zhao, 2018: Variability and predictability of decadal mean temperature and precipitation over China in the CCSM4 last millennium simulation. *Clim. Dyn.* **51**, 2989-3008.

Teaching Experience

2017 Teaching assistant (demonstrating and marking): Our Changing Climate (KGA320)
Unit Coordinator: Prof. Neil Holbrook
Institute for Marine and Antarctic Studies, University of Tasmania

Internships

Dec. 2020 Tidetech, Hobart, Australia
Responsibility: Validate ocean wave data

Jul. 2017 Jiangxi Provincial Institute of Meteorological Sciences, Jiangxi Provincial Meteorological Bureau, Jiangxi, China.
Responsibility: Analysing the high-resolution wind products

Jan. 2012 Public Information Service Department, HUA-FENG Meteorological Media Group, China Meteorological Administration, Beijing, China.
Responsibility: Delivering the daily weather information to the public

Honours and Awards

2017-2020 Ph.D. Scholarship from ARC Centre of Excellence for Climate System Science (CE110001028)
University of Tasmania tuition fee Scholarship
Top-up Scholarship from the QMS-CSIRO joint program

2015 Outstanding Student Representative Award, Beijing Normal University.

2012 Second-class Scholarship Award, Nanjing University of Information Science & Technology.

2011 Principal Scholarship Award (top 1% per academic year), Nanjing University of Information Science & Technology.

2011 Outstanding Student Representative Award, Nanjing University of Information Science & Technology.

Skills and Expertise

Software, Platforms and Operating systems:

Microsoft Word, Microsoft PowerPoint, Microsoft Excel, Adobe Photoshop, Adobe Lightroom, Unix/Linux, Windows, High Performance Computing (HPC) system [National Computational Infrastructure (NCI), which is supported by the Australian Government].

Programming language:

Coding in R and Matlab. Plotting in NCL, R and Matlab. Manipulating data in CDO and NCO.

Conference/Workshop presentations

- 17 Nov 2019** A Linear Inverse Model of South Pacific Decadal Climate Variability, 2019 CLEX workshop, Hobart, Australia. Poster Presentation.
 - 12 Nov 2019** A Linear Inverse Model of South Pacific Decadal Climate Variability, CLEX Tropical Variability Meeting (<https://climateextremes.org.au/tropical-variability-meetings/>), Video Conference.
 - 18 Sep 2019** A Linear Inverse Model of South Pacific Decadal Climate Variability, UTAS STEM Graduate Research Day, Hobart, Australia. Poster presentation.
 - 12 Jul 2019** South Pacific Decadal Climate Variability and Potential Predictability, 27th IUGG General Assembly, Montreal, Canada. Oral presentation.
 - 12 Jun 2019** South Pacific Decadal Climate Variability and Potential Predictability, 2019 AMOS Annual Meeting, Darwin, Australia. Oral presentation.
 - 05 Dec 2019** South Pacific Decadal Climate Variability and Potential Predictability, 2018 QMS Symposium, Hobart, Australia. Oral presentation.
 - 21 Nov 2018** South Pacific Decadal Climate Variability and Potential Predictability, 2018 CLEEx Annual Workshop, Wollongong, Australia. Poster presentation.
 - 14 May 2018** Stochastically Forced Multiscale Climate Variability and Potential Predictability in the Pacific, NESP Project 2.3/CSC Decadal Prediction Workshop, Hobart, Australia. Oral presentation.
 - 16 Mar 2018** Predictability of The Interdecadal Pacific Oscillation, PhD Confirmation Seminar, Hobart, Australia. Seminar.
 - 30 Oct 2017** Potential Predictability of ENSO and ENSO-like Decadal Variability, 2017 ARCCSS/CLEEx Annual Workshop, Canberra, Australia. Poster Presentation.
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Trainings/Summer (Winter) Schools

- 25, 28-29 Nov 2019** Fourier Transforms Training, Hobart, Australia.
- 24-28 Jun 2019** ARCCSS/CLEEx Annual Winter School — Modelling the Climate System. University of Melbourne, Melbourne, Australia.
- 28 Apr-04 May 2019** Advanced Ocean Modelling ‘Summer’ School, Strathgordon, Australia.

- 12 Jul 2018** LaTeX workshop, UTAS, Hobart, Australia.
- 31 Jan-02 Feb 2018** Writing workshop, UNSW, Sydney, Australia.
- 19-23 Jun 2017** ARCCSS/CLEEx Annual Winter School — The Science of Climate Change.
UNSW, Sydney, Australia.
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Last updated: 13 May 2021, Boulder, US.