

Amane Kubo

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Date August 4th, 2026

Education

Ph.d in Civil Engineering Apr. 2026-Present

The University of Tokyo, Japan

Civil engineering, Engineering

Advisor: Yohei Sawada

MA in Civil Engineering Mar. 2026

The University of Tokyo, Japan

Civil engineering, Engineering

Advisor: Yohei Sawada

Thesis: "Predictability of climate tipping focusing on internal variability in the Earth system"

BA in Civil Engineering Mar.2024

The University of Tokyo, Japan

Civil engineering, Engineering

Advisor: Yohei Sawada

Thesis: "Predictability of climate tipping focusing on internal variability in the Earth system"

Completion of Mathematics and Data Science Education Program

Awards & Grants

Iizuka Takeshi scholarship Mar.2024

Nozawa Ichiro scholarship Apr.2020

Tanabe award from Civil engineering department, (Outstanding Research Award) The University of Tokyo

Mar.2024

Research Assistant of International Graduate Program of Innovation for Intelligent World
Oct.2025-Mar. 2026

JST Support for Pioneering Research Initiated by the Next Generation (SPRING), Project for Fostering Advanced Human Resources to Lead Green Transformation (SPRING GX)

Apr. 2026-

GX University Collaborative Study Abroad Program (California Institute of Technology, Climate Model Alliance under supervision of Prof. Tapio Schneider, Dr. Oliver Dunbar and Dr. Claire Valva)

Aug-Sep, 2026

Tobitate! Study Abroad Initiative

Oct, 2026- Oct, 2027

Iizuka Takeshi scholarship for studying abroad

Oct, 2026

Nationality

Japan

Workshops

1. Amane Kubo, Yohei Sawada. "Predictability of climate tipping: data assimilation approach." *Paleoclimate modelers' workshop 2024*, Tokyo, Mar 2024 (Poster)
2. Amane Kubo, Yohei Sawada. "Efficient Uncertainty Quantification of climate projection for Risk Assessment of Climate Tipping" AI • DA workshop 2025, Kanazawa, Ishikawa, Japan, Oct 2025 (Oral)

Peer-reviewed Conferences

3. Amane Kubo, Yohei Sawada. "Predictability of climate tipping: data assimilation approach." *Japan Geoscience Union Meeting 2024*, Makuhari, May,2024 (Oral)

4. Amane Kubo, Yohei Sawada. "Predictability of climate tipping: data assimilation approach." *The 10th International Symposium on Data Assimilation*, Kobe, Oct, 2024
5. Amane Kubo, Yohei Sawada. "Predictability of climate tipping: data assimilation approach." American Geophysical Union Fall Meeting 2024, Washinton D.C., Dec, 2024 (Poster)
6. Amane Kubo, Yohei Sawada. "Manifold learning-aided offline parameter estimation of an Earth system model using observation of changing climate." *Japan Geoscience Union Meeting 2025*, Makuhari, May,2025 (Poster)
7. Amane Kubo, Yohei Sawada. "Manifold Learning-aided Offline Parameter Uncertainty Quantification of an Earth System Model Using Observation of Changing Climate." Asia Oceania Geoscience Society, Singapore, July, 2025 (Oral)
8. Amane Kubo, Yohei Sawada. "Manifold learning-aided offline parameter estimation of an Earth system model using observation of changing climate." *Japan Geoscience Union Meeting 2025*, Makuhari, May,2025 (Oral)
9. Amane Kubo, Yohei Sawada. "Manifold learning-aided offline parameter estimation of an Earth system model using observation of changing climate." *Japan Geoscience Union Meeting 2025*, Makuhari, May,2025 (Poster)
10. Amane Kubo, Yohei Sawada. Uncertainty Quantification of an Earth System Model for risk assessment of Climate Tipping via Non-stationary Extreme Events. *EGU General Assembly 2026*, Vienna, Austria, May 2026 (Poster)
11. Amane Kubo, Yohei Sawada. Uncertainty Quantification of an Earth System Model for risk assessment of Climate Tipping via Non-stationary Extreme Events. *JpGU-AGU 2026*, Makuhari, May, 2026 (Oral)

Publications

1. Kubo, A., & Sawada, Y. (2025). Predictability of climate tipping focusing on the internal variability of the Earth system. *Geophysical Research Letters*, 52, e2024GL113146
<https://doi.org/10.1029/2024GL113146>
2. Kubo, A., & Sawada, Y. (2026). Parametric Uncertainty in Prediction of AMOC weakening by an Earth System Model

Othe competitive research funds

Recommendation Program for Young Researchers and Woman Researchers

Half-yearly basis October 1, 2025 -March 31, 2026

Self-directed Research and Activity Funding for Fiscal Year 2025	500,000 yen
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Research Internship

R-CCS internship programs Aug.26-Sep.27, 2024

Internship program held by RIKEN Center for Computational Science in Kobe and I worked on research in data assimilation team whose theme is “Assimilation of dual multi-parameter phased array weather radar observations for heavy rainfall prediction” supervised by James Taylor.

Fujitsu Summer Research Internship Sep.1, - Oct. 3, 2025

I worked on research about quantum lattice Boltzmann method, which is a quantum computing version of Lattice Boltzmann method. The QLBM has a difficulty in representing nonlinear collision term which contributes to accurate model representation of diffusion, and I implemented 2-dimensional version of linearly-approximated collision term and check its performances.

Visiting Student Researcher in California Institute of Technology

Aug.7 – Sep. 26. 2026

Activities

International Graduate Program of Innovation for Intelligent World May.2024-

Function, Part-time Engineer (<https://deffunction.co.jp/function>) 2023

I worked on implementation of data assimilation system to monitor the traffic in the port.

UTokyo Data Science School (Basic, Application course) 2024-2025

Other Skills

English (TOEFL 101), Japanese (Native),

Programming & Application : python, C++, fortran

Japan Statistical Society Certificate Grade 1