Call for Applications: Specially Appointed Researcher at the Center for Environmental Remote Sensing, Chiba University

August 3rd, 2026

Environmental Prediction Science Laboratory
Center for Environmental Remote Sensing (CEReS), Chiba University
(https://kotsuki-lab.com/)

[Job Description]

The Center for Environmental Remote Sensing (CEReS), Chiba University, processes, archives, and publishes satellite data and related ground observation data, and conducts a broad range of research in Earth environmental sciences. At this time, we are recruiting a specially-appointed researcher to conduct education and research related to the development of AI-based subseasonal-to-seasonal prediction models.

1. Number of Positions: 1

2. Position Summary:

We seek a candidate who can contribute to education and research on AI-based subseasonal-to-seasonal prediction models, AI weather and climate models, ensemble forecasting, data assimilation, super-resolution, generative AI, and related areas. In particular, the candidate is expected to work on stable AI prediction models for long integrations targeting subseasonal atmospheric prediction at lead times of approximately 10-30 days and coupled atmosphere-ocean seasonal prediction at lead times of approximately 1-3 months; integration of AI models with data assimilation; forecast correction using conditional diffusion models and related methods; and super-resolution of low-resolution forecast data. Applicants must hold a doctoral degree by the time of appointment or expect to obtain one in the near future.

3. Job Description:

The successful candidate will conduct education and research on "AI-based seasonal prediction models" within a research project funded by the Japan Science and Technology Agency (JST), and will develop methods to improve 10-90-day subseasonal-to-seasonal prediction for societal applications, including ship operations. Building on systems such as ClimaX-LETKF, which combines an AI weather prediction model developed at Chiba University with ensemble data assimilation, and Anemoi-based global and regional graph

neural networks, the candidate will develop AI seasonal prediction models that maintain numerical stability and physical consistency in integrations extending up to three months. The candidate will also develop AI models trained jointly on atmospheric and oceanic data, with the aim of establishing prediction methods that appropriately represent physical processes that underpin seasonal predictability and their remote influences.

Specific research tasks may include the following. However, research topics may be adjusted in light of the applicant's research background and technical expertise, provided that they contribute to the project mission.

A) Development of AI weather and climate models, including subseasonal-to-seasonal prediction models based on the existing ClimaX-LETKF or Anemoi system, as well as investigation, comparison, and development of next-generation AI models that replace or enhance ClimaX, drawing on recent AI weather-prediction architectures such as Aurora, SFNO, and Anemoi.
B) Development of AI prediction models capable of stable integration with longer forecast intervals by changing the training data for existing models from approximately six-hourly data to daily means, 10-day means, or other temporal aggregations.
C) Development of forecast-correction methods using conditional diffusion models, generative AI, statistical correction, and related approaches to suppress forecast-error growth and model drift during integrations extending up to three months.
D) Development of Transformer-based super-resolution methods for low-resolution outputs from physical and AI models, and their application to AI guidance for subseasonal-to-seasonal prediction.

This position is intended not merely to apply existing AI models, but to advance research that integrates AI prediction models, generative models, data assimilation, and ensemble forecasting while accounting for the physical processes governing predictability on subseasonal-to-seasonal timescales.

The duties also include publishing research results in peer-reviewed journals, presenting at domestic and international conferences, and conducting collaborative research with other institutions participating in the project. Further information about the project is available at https://www.jst.go.jp/k-program/program/kaiyou4.html. This research contributes to "Research and Development Item 6: Research on a Meteorological and Oceanographic Seasonal Prediction Simulator" (Leader: Dr. Yasumasa Miyazawa, JAMSTEC). The specific research and development activities are planned to be conducted in collaboration with the Mathematical Science of Water Disaster Research

Group, Graduate School of Engineering, The University of Tokyo (PI: Prof. Yohei Sawada).

Please contact Prof. Shunji Kotsuki below for further details.

[Qualifications]

Applicants should have research experience in, or a strong interest in, one or more of the following fields: machine learning, deep learning, generative AI, meteorology, climate science, atmospheric science, oceanography, numerical weather prediction, seasonal prediction, data assimilation, remote sensing, applied mathematics, information science, and data science. Experience in meteorology or climate science is welcome but is not required. Applicants from information science, mathematics, computational science, physics, engineering, and related fields who have experience with AI models or large-scale numerical computation and wish to pursue research on weather and climate prediction are also welcome.

[Related Research Fields]

Machine learning, deep learning, generative AI, artificial intelligence, data science, information science, mathematics, computational science, meteorology, climate science, atmospheric science, oceanography, Earth science, numerical weather prediction, seasonal prediction, data assimilation, remote sensing, applied mathematics, statistics, computer science, and related fields.

4. Hire Date

As early as possible between October 2026 and April 2027 (negotiable).

5. Employment Period:

The appointment is made on a fiscal-year basis, ending on March 31. It may be renewed based on work performance, operational needs, the availability of employment funding, and other relevant criteria.

6. Employment Conditions:

(1) Job title: Specially-appointed researcher (full-time).

(2) Salary, etc.: Determined based on years of experience in accordance with Chiba University's salary regulations for specified-term employees.

(3) Working hours: from 8:30 to 17:15, 5 days a week, 7 hours and 45 minutes per day (under the Discretionary Labor System for Professional Work).

(4) Holidays: Saturdays, Sundays, National holidays, and year-end and New Year

holidays.

(5) Leave: Granted in accordance with Chiba University's employment regulations.

(6) Various allowances: A commuting allowance will be provided to eligible employees in accordance with university regulations.

(7) Insurance: The successful candidate will be enrolled in the Mutual Aid Association, employment insurance, and workers' compensation insurance.

7. Selection Process:

Selection will be made based on application screening and interview(s).

8. Required documents:

(1) Complete CV: any style or format is accepted. *Email address is required.

(2) List of research achievements: please list peer-reviewed publications and others separately.

(3) Copy of 3 major publications. In principle, these should be papers for which the applicant is the sole or first author.

(4) A statement of the applicant's research experience and a research plan after appointment, each limited to two A4 pages. Please also indicate the programming languages that the applicant can use.

(5) Contact information for one or two referees outside the Center for Environmental Remote Sensing, Chiba University. No prescribed format is required.

9. Deadline for this recruitment:

Applications must arrive by October 31, 2026. However, the recruitment may be closed as soon as a suitable candidate is selected.

10. Documents to be sent to:

Shunji Kotsuki
Center for Environmental Remote Sensing, Chiba University
1-33 Yayoi-cho, Inage-ku, Chiba-city, Chiba, Japan 263-8522

- Note "Specially Appointed Researcher Application Documents Enclosed" in red on the front of the envelope if sent by registered mail.

11. Contacts:

- **Job related:**

  Shunji Kotsuki
  Center for Environmental Remote Sensing, Chiba University
  Phone: 043-290-3861, e-mail: shunji.kotsuki@chiba-u.jp

- **Benefits related:**

  Yuji Wakatsuki
  Center Support Unit., Science and Engineering General Affairs Division, Nishi-Chiba District, Chiba University
  Phone: 043-290-3832, e-mail: bee3832@office.chiba-u.jp

12. Notes:

- Application documents will not be used for any other purposes than the selection process. These documents will not be returned unless a stamped self-addressed envelope is enclosed.
- Interviews may be conducted during the selection process. Travel expenses will not be reimbursed.
- Salary will be determined in accordance with Chiba University's regulations for specially appointed staff, based on years of experience. For a researcher in the first year after obtaining a Ph.D. degree, the expected annual income is approximately 5.5 million yen.
- The laboratory has established a Research Policy concerning authorship, research activities, working conditions, and the research environment. Prospective applicants are encouraged to consult the policy as appropriate: https://kotsuki-lab.com/ResearchPolicies/
- Further information is available at: https://kotsuki-lab.com/recruit/en/