

Job opportunity in the Institute for Space-Earth Environmental Research (ISEE), Nagoya University (ISEE job opportunity No.04 FY2023)

1. Job title/quantity: Designated assistant professor

2. Field and Mission:

The Center for Integrated Data Science (CIDAS) at the Institute for Space and Earth Environmental Research (ISEE), Nagoya University, Japan, was established for the purpose of conducting basic and applied research to realize advance in topics in the space solar-terrestrial system based on integrated analysis from broad data sources and advanced computer simulations. In particular, the Center aims to enable novel research only achievable through the integration of different types of data by developing an analysis environment that combines satellite and ground-based observational data with data from numerical simulations. Currently, both the ERG Science Center and Hinode Science Center operate within CIDAS.

In order to further solidify these efforts, a new "Heliospheric Science Center (HSC)" will be established in April 2022 to promote heliospheric system science. The HSC will be jointly operated with the JAXA Institute of Space and Astronautical Science (ISAS) and the National Astronomical Observatory of Japan (NAOJ). At the center, the research environment using satellite data, ground-based observation data, and numerical simulations is included. Missions that will be supported at the HSC will include Arase, Mio (BepiColombo Mercury Orbiter), Hinode, and Solar-C (EUVST) which is a future solar physics mission by JAXA/ISAS due for launch in mid-2020s. The HSC will provide data, analysis software, and computer resources to the community in support of multi-source multi-discipline scientific investigations.

- Center for Heliosphere Science : <https://chs.isee.nagoya-u.ac.jp/en/>

3. Expectations for this position

We seek candidates who will promote the use of data obtained from the Mio and Arase missions, develop relevant databases and integrated analysis tools, and support and improve in-house heliospheric simulations. The successful candidate will also be responsible for designing observation plans in collaboration with other missions.

We also seek expertise in data science, new computational methods for data-driven simulations, advanced analysis methods including machine learning. The positions are expected to engage in their own research in heliospheric system science through incorporating new methods and knowledge of data science.

The successful candidates are expected to promote research that integrates across missions, disseminate the new research environment to the community through, e.g., workshops and outreach, and collaborate with researchers across the country to lead and promote novel investigations in heliospheric system science in Japan. Through the activities at CIDAS, we expect the new CIDAS hires will contribute to future space missions in the field of heliospheric system science.

4. Term: up to March 31, 2025.

5. Eligibility: Ph.D. as of October 1, 2023

6. Starting Date: As early as possible

## 7. Application Materials

- (1) Curriculum vitae,
- (2) Publication and research activity list,
- (3) Summary of research achievements and interests,
- (4) Research plan (maximum two pages),

Please include all of the following items;

- how you intend to contribute to the research and development requirements described in section "3."
  - which computer languages (e.g., IDL, Python, etc) , platforms, and mission-related software (e.g., ERG integrated analysis software "SPEDAS" or "PySPEDAS") in which you have development experience.
  - short description of your own research project that could be undertaken as in the description in "3"
- (5) Names and contact information for three professional references
  - (6) Applicable Specific Category Determination Form

## 8. Application Deadline: August 27, 2023

9. Submission: Applicants are required to make one PDF file (up to 10MB) that includes all documents and send it by email to the following address with the subject "Application for ISEE job opportunity No. 04 FY2023."

inst-recruit(at)adm.nagoya-u.ac.jp \*Please to replace the (at) with @

(A receipt confirmation will be sent by email within 3 business days after the submission. If you do not receive the receipt confirmation email by then, please contact the address in "9. Contact: 1) Regarding documents to be submitted.")

## 10. Contact:

- 1) Regarding documents to be submitted

Kahori Nishi, General Affairs Division

Institute for Space-Earth Environmental Research, Nagoya University

F3-3 (250), Furo-cho, Chikusa-ku, Nagoya, Aichi 464-8601, Japan

Email: ken-jin(at)adm.nagoya-u.ac.jp \*Please to replace the (at) with @

Phone: +81-52-789-5539

- 2) Regarding ISEE and application content

Prof. Yoshizumi Miyoshi (Director of CIDAS)

Institute for Space-Earth Environmental Research, Nagoya University

F3-3 (250), Furo-cho, Chikusa-ku, Nagoya, Aichi 464-8601, Japan

Email: miyoshi(at)isee.nagoya-u.ac.jp \*Please to replace the (at) with @

Phone: +81-52-747-6340

## 11. Remarks:

Personal information provided in relation to the application will be used only for the purpose of screening. Upon completion of the screening, we will securely dispose all personal information, except for the information of the successful candidate. The Institute for Space–Earth Environmental Research is an active promotor of gender equality. Browse the web page below for more detail.

<http://www.kyodo-sankaku.provost.nagoya-u.ac.jp/en/>

In November 2021, with the clarification of the scope of control of "deemed exports" under the Foreign Exchange and Foreign Trade Act ("FEFTA"), a portion of the provision of confidential information must comply with FEFTA. Technology provided by universities and research institutions to faculty and staff is FEFTA is subject to control. As a result of this change, faculty applications will also be subject to FEFTA controls. When applying for this solicitation, you will be required to submit an Applicable Specific Category Determination Form in accordance with the Applicable Specific Category Determination Flowchart. Please download the form below and submit it.

<https://nuss.nagoya-u.ac.jp/s/bLFocRofmoj83zp>

In addition, faculty members are required to submit a "Confirmation Form" at the time of employment.