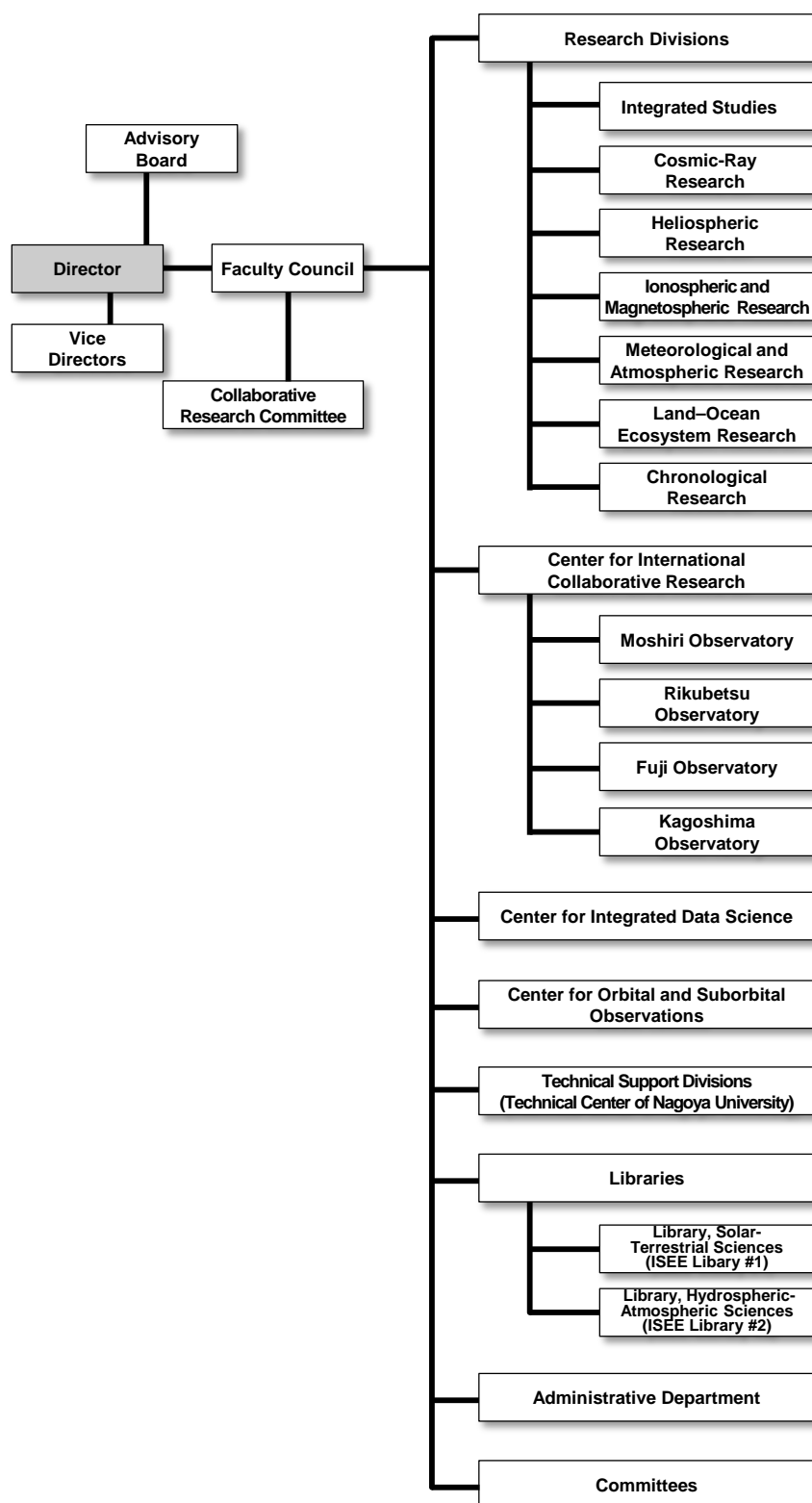


1. History

Solar-Terrestrial Environment Laboratory	Hydrospheric Atmospheric Research Center (HyARC)	The Nagoya University Center for Chronological Research
<p>May, 1949 Research Institute of Atmospherics, Nagoya University was established.</p> <p>April, 1958 Cosmic-ray Research Laboratory, Faculty of Science, Nagoya University was established.</p> <p>June, 1990 The Solar-Terrestrial Environment Laboratory (STEL) was established.</p> <p>April, 1995 The Center for Joint Observations and Data Processing was organized.</p> <p>April, 2003 The Rikubetsu Observatory was organized.</p> <p>April, 2004 The Geospace Research Center was established.</p> <p>March, 2006 Laboratory was relocated to the Higashiyama Campus.</p> <p>April, 2010 Approved as one of the Joint Usage/Research Centers.</p>	<p>April, 1957 The Water Research Laboratory, Faculty of Science, Nagoya University was established.</p> <p>September, 1973 The Water Research Institute (WRI), Nagoya University was organized.</p> <p>April, 1993 The Institute for Hydrospheric-Atmospheric Sciences (IHAS), Nagoya University was organized.</p> <p>April, 2001 The Hydrospheric Atmospheric Research Center (HyARC), Nagoya University was established.</p> <p>April, 2010 Approved as one of the Joint Usage/Research Centers.</p>	<p>February, 1981 The Tandetron Accelerator Laboratory was established in the Radioisotope Research Center of Nagoya University.</p> <p>March, 1982 Installation of the Tandetron Accelerator Mass Spectrometry (AMS) machine No.1 was completed.</p> <p>January, 1987 Inter-University Service of ^{14}C measurements was started with the Tandetron AMS machine No.1.</p> <p>June, 1990 The Nagoya University Dating and Material Research Center was established.</p> <p>March, 1997 The Tandetron AMS machine No. 2 was newly introduced.</p> <p>April, 2000 The Nagoya University Center for Chronological Research was organized. The CHIME dating system was transferred from the School of Science.</p>
<p>October, 2015 Institute for Space–Earth Environmental Research (ISEE), merging the laboratory and two centers, was established.</p>		
<p>January, 2016 ISEE was approved as one of the Joint Usage/Research Centers.</p>		

2. Organization



3. Staff

Director	Kanya Kusano
Vice Director	Kazuo Shiokawa
Vice Director	Nobuhiro Takahashi

April 1, 2021–March 31, 2022

*: Concurrent post

▲: Left the Institute in the 2021 academic year

○: Joined the Institute in the 2021 academic year

*: Belongs to Institute for Advanced Research Section

Division for Integrated Studies

Professor	Kanya Kusano
Professor	Yoshizumi Miyoshi (*)
Associate Professor	Satoshi Masuda
Associate Professor	Takayuki Umeda (*)
Lecturer	Shinsuke Imada ▲
Assistant Professor	Akimasa Ieda
Designated Assistant Professor	Yumi Bamba *
Designated Assistant Professor	Takafumi Kaneko ▲
Designated Assistant Professor	Hisashi Hayakawa *
Research Institution Researcher	Sandeep Kumar

Division for Ionospheric and Magnetospheric Research

Professor	Masafumi Hirahara
Professor	Kazuo Shiokawa (*)
Associate Professor	Yuichi Otsuka
Associate Professor	Satonori Nozawa
Associate Professor	Masahito Nosé
Associate Professor	Nozomu Nishitani (*)
Associate Professor	Claudia Martinez-Calderon (*)
Lecturer	Shin-ichiro Oyama
Designated Assistant Professor	Atsuki Shinbori
Designated Assistant Professor	Sneha Yadav ▲

Division for Cosmic-Ray Research

Professor	Yoshitaka Itow
Professor	Hiroyasu Tajima (*)
Associate Professor	Yutaka Matsubara
Associate Professor	Fusa Miyake
Associate Professor	Shingo Kazama **
** Kobayashi-Maskawa Institute for the Origin of Particles and the Universe	
Lecturer	Akira Okumura
Assistant Professor	Hiroaki Menjo
Designated Assistant Professor	Kazufumi Sato ▲
Designated Assistant Professor	Mitsunari Takahashi ○
Researcher	Kayo Kanzawa
JSPS Postdoctoral Fellowships for Research in Japan (Standard)	Masatoshi Kobayashi ○
Designated Technical Staff	Shozo Ohta ○
Designated Technical Staff	Kinji Morikawa
Technical Assistant	Kazuhiro Huruta

Division for Meteorological and Atmospheric Research

Professor	Akira Mizuno
Professor	Michihiro Mochida
Professor	Nobuhiro Takahashi (*)
Professor	Kazuhisa Tsuboki (*)
Associate Professor	Tomoo Nagahama
Associate Professor	Hirohiko Masunaga
Associate Professor	Taro Shinoda (*)
Assistant Professor	Sho Ohata *
Assistant Professor	Taku Nakajima
Designated Assistant Professor	Shinnosuke Ishizuka *○
Researcher	Ruichen Zhou ○
Researcher	Fumie Furuzawa
Researcher	Gemma Mizoguchi ○
JSPS Postdoctoral Fellowships for Research in Japan (Standard)	Yunhua Chang
Technical Assistant (Research Support Facilitator)	Kazuji Suzuki

Division for Heliospheric Research

Professor	Munetoshi Tokumaru
Associate Professor	Kazumasa Iwai
Assistant Professor	Ken-ichi Fujiki

Division for Land–Ocean Ecosystem Research

Professor	Tetsuya Hiyama
Professor	Joji Ishizaka (✱)
Associate Professor	Hidenori Aiki
Associate Professor	Naoyuki Kurita
Lecturer	Hatsuki Fujinami
Assistant Professor	Yoshihisa Mino
Designated Assistant Professor	Masayuki Kondo ○
Researcher	Hironari Kanamori
Researcher	Yuto Tashiro ○
Researcher	Syohei Morino ○▲
Research Institution Researcher	HanumanThu Himabindu ○
Technical Assistant	Kaho Suganuma ○▲
Technical Assistant	Mizuki Takeuchi ○▲

Division for Chronological Research

Professor	Hiroyuki Kitagawa
Professor	Masayo Minami
Associate Professor	Takenori Kato (✱)
Assistant Professor	Hiroataka Oda
Researcher	Masako Yamane
Research Institution Researcher	Ryusei Kuma ○
Designated Technical Staff	Masami Nishida
Designated Technical Staff	Yuriko Hibi

Center for International Collaborative Research

Director • Professor	Kazuo Shiokawa
Professor	Joji Ishizaka
Professor	Munetoshi Tokumaru (✱)
Professor	Tetsuya Hiyama (✱)
Professor	Akira Mizuno (✱)
Professor	Masayo Minami (✱)
Professor	Michihiro Mochida (✱)
Designated Professor (Cross Appointment)	K. D. Leka
Designated Professor (Cross Appointment)	Lynn Marie Kistler
Associate Professor	Nozomu Nishitani
Associate Professor	Claudia Martinez-Calderon
Associate Professor	Naoyuki Kurita (✱)
Associate Professor	Satonori Nozawa (✱)
Lecturer	Shinsuke Imada (✱)▲
Lecturer	Hatsuki Fujinami (✱)
Assistant Professor	Hiroaki Menjo (✱)
Designated Assistant Professor	Masafumi Shoji
Designated Assistant Professor	Sung-Hong Park ▲
JSPS Postdoctoral Fellowships for Research in Japan (Standard)	Hyangpyo Kim ○▲

Center for Integrated Data Science

Director • Professor	Yoshizumi Miyoshi
Professor	Kazuhisa Tsuboki
Professor	Joji Ishizaka (✳)
Professor	Yoshitaka Itow (✳)
Professor	Kanya Kusano (✳)
Associate Professor	Takayuki Umeda
Associate Professor	Takenori Kato
Associate Professor	Hidenori Aiki (✳)
Associate Professor	Masahito Nosé (✳)
Associate Professor	Satoshi Masuda (✳)
Associate Professor	Hirohiko Masunaga (✳)
Designated Associate Professor	Tomoaki Hori
Lecturer	Shinsuke Imada (✳)▲
Assistant Professor	Akimasa Ieda (✳)
Designated Assistant Professor	Haruhisa Iijima
Designated Assistant Professor	Sachie Kanada
Designated Assistant Professor	Masahiro Kitahara ▲
Designated Assistant Professor	Satoko Nakamura
Designated Assistant Professor	Chae-Woo Jun
Designated Assistant Professor	YunHee Kang
Designated Assistant Professor	Atsuki Shinbori (✳)
Researcher	Masaya Kato
Researcher	Yoshiki Fukutomi
Designated Technical Staff	Mariko Kayaba
Designated Technical Staff	Asayo Maeda
Technical Assistant (Research Support Facilitator)	Nanako Hirata
Technical Assistant	Tomoyo Ogawa ○▲

Center for Orbital and Suborbital Observations

Director • Professor	Nobuhiro Takahashi
Professor	Hiroyasu Tajima
Professor	Joji Ishizaka (✳)
Professor	Kazuhisa Tsuboki (✳)
Professor	Masafumi Hirahara (✳)
Designated Professor	Masataka Murakami
Associate Professor	Taro Shinoda
Associate Professor	Hidenori Aiki (✳)
Designated Associate Professor	Kazutaka Yamaoka ***
***2021.11.1~2022.3.31 Institute of Materials and Systems for Sustainability	
Assistant Professor	Sho Ohata (✳)*
Designated Assistant Professor	Youko Yoshizumi ▲
Designated Assistant Professor	Takeharu Kouketsu

Visiting Academic Staff/Visiting Faculty Members

Visiting Professor	Shinsuke Imada ○
Visiting Professor	Yoshiya Kasahara
Visiting Professor	Tomo'omi Kumagai
Visiting Professor	Yoshikatsu Kuroda
Visiting Professor	Yoko Kokubu
Visiting Professor	Hiroyuki Shinagawa
Visiting Professor	Nobuo Sugimoto
Visiting Professor	Kanako Seki
Visiting Professor	Hidetaka Tanaka ○
Visiting Professor	Hotaek Park
Visiting Associate Professor	Fumio Abe
Visiting Associate Professor	Christian Leipe
Visiting Associate Professor	Yasunobu Ogawa
Visiting Associate Professor	Shinji Saito
Visiting Associate Professor	Daikou Shiota
Visiting Associate Professor	Iku Shinohara
Visiting Associate Professor	Toru Tamura
Visiting Associate Professor	Hiroshi Hayashi ○
Visiting Associate Professor	Hiroki Mizuochi
Visiting Associate Professor	Kikuko Miyata ○
Visiting Associate Professor	Shoichiro Yokota ○
Visiting Associate Professor	Shigeyuki Wakagi ○
	Shun Ohishi
(Emeritus Professor)	Yutaka Mtsumi ○

Technical Center of Nagoya University

Senior Technician	Akiko Ikeda
Senior Technician	Yasusuke Kojima
Senior Technician	Haruya Minda
Technician	Wataru Okamoto
Technician	Tetsuya Kawabata
Technician	Tomonori Segawa
Technician	Yoshiyuki Hamaguchi
Technician	Ryuji Fujimori
Technician	Yasushi Maruyama
Technician	Takayuki Yamasaki
Technician	Yuka Yamamoto
Assistant Technician	Takumi Adachi
Assistant Technician	Moeto Kyushima

Administration Department

Director, Administration Department	Satoshi Furuhashi ○
General Affairs Division	
Manager, General Affairs Division	Mitsuyuki Hirokawa ▲
Specialist, General Affairs Section	Hideaki Yano
Section Head, General Affairs Section	Takamasa Sato ○
Section Head, General Affairs Section	Tomoko Mizutani ▲
Section Head, Personnel Affairs Section	Yohei Sato ○
Section Head, Budget Planning Section	Mirei Miyao
Leader, Personnel Affairs Section	Yoshikazu Akamatsu ○
Administrator	Junpei Okada
Administrator	Asana Goto
Administrator	Megumi Goto
Administrator	Hisako Watabe ▲
Designated Supervisor	Tadashi Tsuboi

Foreign Visiting Cooperation Researcher

2021.6.26 – 2022.6.25	Xiaolong Li
2021.9.11 – 2021.12.10	Aleksandr Rubtsov
2021.10.1 – 2021.12.21	Adhitya Pavithran
2021.11.13 – 2021.12.23	Daniel Izuikedinachi Okoh
2021.11.15 – 2022.2.23	Dejene Ambisa Terefe
2022.1.23 – 2022.2.11	HajiHossein Azizi

Toyokawa Branch

Designated Technical Staff	Kayoko Asano
Technical Assistant (Research Support Facilitator)	Yasuo Kato

4. Committee of Other Organizations

Committee of Other Organizations

Contact Post	Job Title	Organizations	Name of Committee / Title
Joji Ishizaka	Professor	North Pacific Marine Science Organization (PICES)	Co-Chair of Advisory Panel for a CREAMS/PICES Program in East Asian Marginal Seas
Joji Ishizaka	Professor	North Pacific Marine Science Organization (PICES)	Member of Working Group 35: Third North Pacific Ecosystem Report
Joji Ishizaka	Professor	Northwest Pacific Action Plan (NOWPAP)	Focal Point of Center for Special Monitoring and Coastal Environmental Assessment Regional Active Center (CEARAC)
Yoshitaka Itow	Professor	Institute of Particle and Nuclear Studies, KEK	J-Parc Program Advisory Committee member
Hiroyuki Kitagawa	Professor	International Continental Scientific Drilling Program (ICDP), Dead Sea Deep Sea Drilling Project (DSDDP)	Principal Investigator
Hiroyuki Kitagawa	Professor	Geosciences	Editor
Kazuo Shiokawa	Professor	Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)	President
Nobuhiro Takahashi	Professor	National Aeronautics and Space Administration (NASA)	Global Precipitation Measurement (GPM) Joint Precipitation Science Team (JPST) member
Nobuhiro Takahashi	Professor	National Aeronautics and Space Administration (NASA)	Aerosol and Cloud, Convection and Precipitation (ACCP) Science and Application Transition Team (SATT) member
Nobuhiro Takahashi	Professor	National Aeronautics and Space Administration (NASA)	Aerosol and Cloud, Convection and Precipitation (ACCP) Algorithm Working Group (AWG) member
Hiroyasu Tajima	Professor	Institute of Particle and Nuclear Studies, KEK	B-factory Programme Advisory Committee member
Hiroyasu Tajima	Professor	Progress of Theoretical and Experimental Physics	Editor
Hiroyasu Tajima	Professor	The Scientific World Journal	Editorial Board member
Tetsuya Hiyama	Professor	International Arctic Science Committee (IASC)	Terrestrial Working Group (TWG) member
Yoshizumi Miyoshi	Professor	EISCAT Scientific Association	Strategy Group on the Future of EISCAT member
Yoshizumi Miyoshi	Professor	Committee on Space Research (COSPAR)	Chair of Panel on Radiation Belt Environment Modeling
Yoshizumi Miyoshi	Professor	Committee on Space Research (COSPAR)	Task Group on Establishing a Constellation of Small Satellites (TGCSS) Sub-Group for Radiation Belt member
Yoshizumi Miyoshi	Professor	Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)	Bureau member
Yoshizumi Miyoshi	Professor	National Science Foundation/ Geospace Environment Modeling (NSF/GEM)	Steering Committee member
Yoshizumi Miyoshi	Professor	EU-Horizon 2020: SafeSpace	Advisory Panel
Yoshizumi Miyoshi	Professor	Annales Geophysicae	Editor

Contact Post	Job Title	Organizations	Name of Committee / Title
Yoshizumi Miyoshi	Professor	Earth and Planetary Physics	Editor
Yoshizumi Miyoshi	Professor	Polar Research	Guest editor
Yoshizumi Miyoshi	Professor	Scientific Reports	Editorial Board member
Yoshizumi Miyoshi	Professor	Frontiers in Astronomy and Space Sciences	Associate Editor
Michihiro Mochida	Professor	International Commission on Atmospheric Chemistry and Global Pollution (iCACGP)	Commission member
Michihiro Mochida	Professor	Atmospheric Environment	Editorial Advisory Board member
Hidenori Aiki	Associate Professor	Journal of Physical Oceanography	Associate Editor
Hidenori Aiki	Associate Professor	Journal of Atmospheric and Oceanic Technology	Associate Editor
Yuichi Otsuka	Associate Professor	Journal of Astronomy and Space Sciences	Editor
Yuichi Otsuka	Associate Professor	Earth and Planetary Physics	Guest editor for the special issue of “Recent Advances in Equatorial Plasma Bubble and Ionospheric Scintillation”
Nozomu Nishitani	Associate Professor	Super Dual Auroral Radar Network (SuperDARN)	Vice chair of Executive Council
Nozomu Nishitani	Associate Professor	Polar Science	Guest editor for the special issue of “SuperDARN / Studies of Geospace Dynamics - Today and Future”
Nozomu Nishitani	Associate Professor	Earth, Planets and Space (EPS)	Guest editor for the special issue of 20th Anniversary Issue: Earth, Planetary, and Space Sciences in the Next Decade
Satonori Nozawa	Associate Professor	EISCAT Scientific Association	Council member
Masahito Nosé	Associate Professor	International Association of Geomagnetism and Aeronomy (IAGA)	Division V Chair
Masahito Nosé	Associate Professor	International Union of Geodesy and Geophysics	Resolution Committee member
Masahito Nosé	Associate Professor	Earth, Planets and Space (EPS)	Vice editors-in-chief
Masahito Nosé	Associate Professor	Polar Data Journal	Editorial Board member
Hirohiko Masunaga	Associate Professor	National Aeronautics and Space Administration (NASA)	ACCP Science Community Cohort
Hirohiko Masunaga	Associate Professor	World Climate Research Programme (WCRP) Global Energy and Water cycle Exchanges (GEWEX)	GEWEX Data and Analysis Panel (GDAP) member
Hirohiko Masunaga	Associate Professor	National Aeronautics and Space Administration (NASA) and JAXA	Joint Precipitation Measurement Mission Science Team member
Hatsuki Fujinami	Lecturer	Climate and Ocean: Variability, Predictability and Change (CLIVAR)/ Global Energy and Water cycle Exchanges (GEWEX)	Monsoons Panel Asian-Australian Monsoon Working Group member

5. Joint Research Programs

One of the major functions of the ISEE is to promote and conduct collaborative research on space–Earth environmental science together with researchers from universities and institutes outside the ISEE. On January 14, 2016, the ISEE was certified by MEXT of Japan as a joint usage/research center for the third medium-term goal/planning period (FY2016 to FY2021) of national universities. During this period, we promoted two projects: “Study of the coupling processes in the solar–terrestrial system using ground-based observation networks” and “Establishment of an international collaborative research hub to solve research issues in the global (terrestrial) environment and space applications based on comprehensive studies of the space–Sun–Earth system.” The former focuses on coupling processes in the solar–terrestrial system and the interactions of neutral and plasma components in the Earth’s atmosphere by establishing an international ground-based observation network ranging from low- to high-latitude regions, especially in Asia and Africa. While the latter aims to establish an international collaborative research hub for comprehensive studies of the space–Sun–Earth system, space applications, space weather forecasting, and environmental problems, such as global warming.

The following 12 categories of open-call joint research programs were prepared for application in FY2021. These collaborative research programs are executed using the instruments, software/databases, and facilities of the ISEE. Joint research programs. 01) to 03) are managed by the CICR; 07) and 08) are managed by the CIDAS; and 09) and 10) are managed by the Division for Chronological Research. In FY2021, we adopted 200 research projects based on proposals from researchers worldwide.

- 00) ISEE Symposium
- 01) Joint Research Program (International)
- 02) ISEE International Joint Research Program (*)
- 03) ISEE International Workshop
- 04) Joint Research Program (General)
- 05) Joint Research Program (Student Encouragement)
- 06) Joint Research Program (Symposium)
- 07) Joint Research Program (Computing Infrastructure)
- 08) Joint Research Program (Database Management)
- 09) Joint Research Program (Accelerator Mass Spectrometry Analysis)
- 10) Carbon 14 Analysis Service
- 11) SCOSTEP Visiting Scholar (SVS) Program (*)

(*) Applicable only to foreign researchers

Due to the influence of COVID-19, as in FY2020, most of the international joint research programs and workshops were canceled or implemented by changing the scope, and most symposiums and research meetings were conducted online. The fourth ISEE symposium, which had to be postponed in FY2020, was held online March 1–3, 2022, entitled “International Conference on Heavy Rainfall and Tropical Cyclone in East Asia,” led by Professor Kazuhisa Tsuboki.

A community meeting was held online with researchers from inside and outside the institute on August 5, 2021. At the end of the third medium-term period, we surveyed to gather inputs from the community and received a variety of opinions and suggestions regarding our existing joint research programs and interdisciplinary research. We shared this information and discussed future joint research programs.

The year-end evaluation by MEXT stated that the ISEE is a unique research facility that integrates space and earth sciences and that the scale of joint usage/research programs is large, especially in international collaboration with related research institutions. As a result, the ISEE received an “S” rating, designating it as a “highly significant” institution. In the fourth medium-term goal/planning period (FY2022 to FY2027), we will add five categories of joint research programs and focus on fostering young researchers, promoting international joint usage/research, integrating different fields through interdisciplinary joint research, and developing new science related to the space–Sun–Earth system.

List of Accepted Proposals

■ ISEE International Joint Research Program

Proposer	Affiliation*	Job title*	Corresponding ISEE researcher	Title of the research program
Akala, Andrew Oke-'Ovie	University of Lagos	Associate Professor	Otsuka, Y.	Investigation of the responses of global equatorial/low-latitude ionosphere to CIR-driven and CME-driven intense geomagnetic storms during solar cycle 24
Teh, Wai Leong	National University of Malaysia	lecturer	Umeda, T.	Understanding the Role of Magnetic Island in Plasma Acceleration and Energy Dissipation during Magnetic Reconnection
Berger, Thomas	University of Colorado at Boulder	Research Staff	Imada, S.	Investigation of Solar Polar Magnetic Fields using Hinode/SP and SDO/HMI Data
Santolík, Ondřej	Institute of Atmospheric Physics, Czech Academy of Sciences	Professor	Miyoshi, Y.	Investigation of electromagnetic waves in space
Buranapratheprat, Anukul	Burapha University	Assistant Professor	Ishizaka, J.	An investigation of Mekong River plume in the South China Sea influenced by dam construction and climate change: a numerical modeling approach
Poluianov, Stepan	University of Oulu	Senior Researcher	Kurita, N.	Solar and terrestrial effects in the 50-year long tritium record from Antarctica
Mohanty, Pravata Kumar	Tata Institute of Fundamental Research	Reader	Matsubara, Y.	Study of galactic cosmic rays in the near-Earth space by high resolution multi-directional muon telescopes
Spiegl, Tobias Christian	Freie Universität Berlin	Postdoctoral Researcher	Miyake, F.	Using cosmogenic isotopes to trace back large-scale atmospheric dynamics of the neutron monitor era
Okoh, Daniel Izuikedinachi	National Space Research and Development Agency	Researcher and Coordinator	Shiokawa, K.	Investigating Variations and Similarities between Consecutive Equatorial Plasma Bubble Occurrences and Propagation Speeds across Longitudinal Sections of the Globe
Welsch, Brian	University of Wisconsin -Green Bay	Associate Professor	Kusano, K.	Exploring Magnetic Energies to Understand and Predict CME Onset
Maurya, Ajeet Kumar	Doon University	Assistant Professor	Otsuka, Y.	Characterization of the gravity waves of the meteorological origin and their role in vertical atmosphere-ionosphere coupling
Lugaz, Noé	University of New Hampshire	Research Associate Professor	Kusano, K.	Sheaths of Coronal Mass Ejections and Their Effects on Earth's Dayside Magnetosphere and Radiation Belts
Al-Haddad, Nada	University of New Hampshire	Research Assistant Professor	Kusano, K.	Magnetic Structures and Associated Flows of Coronal Mass Ejections
Fedun, Viktor	The University of Sheffield	Senior Lecturer	Kusano, K.	Comprehensive analysis of solar atmospheric dynamics driven by interacting vortex tubes
Zhang, Jie	George Mason University	Full Professor	Kusano, K.	Study the Origin of Solar Eruptions Using Homologous Events

* Proposer's affiliation and job title are as of the proposal submission date.

■ ISEE/CICR International Workshop

Not adopted FY2021.

Lists of Collaboration Resources

■ Instruments

Name	Contact Person
Multi-Directional Cosmic Ray Muon Telescope (Nagoya)	Y. Matsubara
Multi-Station IPS Solar Wind Observation System (Toyokawa, Fuji, and Kiso)	M. Tokumaru
ELF/VLF Network	K. Shiokawa
ISEE Magnetometer Network	K. Shiokawa
ISEE Riometer Network	K. Shiokawa
Optical Mesosphere Thermosphere Imagers	K. Shiokawa
Sodium LIDAR (Tromsø)	S. Nozawa
MF Radar (Tromsø)	S. Nozawa
Five-Wavelength Photometer (Tromsø)	S. Nozawa
Meteor Radar (Alta)	S. Nozawa
SuperDARN Hokkaido Pair of (HOP) Radars (Rikubetsu)	N. Nishitani
Upper Air Sounding Systems (two sets)	K. Tsuboki
Polarimetric Radar Systems (two sets)	K. Tsuboki
Ka-Band Polarimetric Radar	K. Tsuboki
Hydrometeor Video Sonde (HYVIS) System	K. Tsuboki
Fourier Transform Infrared (FTIR) Spectrometer for Atmospheric Composition Measurement (Rikubetsu)	T. Nagahama
Sea Spray Aerosol Optical Particle Counter	H. Aiki
Low-Background Beta-Ray Counter	N. Kurita
Water Isotope Analyzer (Picarro L2130-i)	N. Kurita

■ Software/Databases

Name	Contact Person
Hinode Science Center, Nagoya University	K. Kusano
ERG Science Center	Y. Miyoshi
QL Plot Archive of Satellite Data for Integrated Studies	Y. Miyoshi
MHD Simulation on the Magnetospheric Environment	T. Umeda
Numerical Simulation Codes for Plasma Kinetics	T. Umeda
Cosmic Ray Intensity Database	Y. Matsubara
Interplanetary Scintillation Data	M. Tokumaru
Solar Wind Speed Data	M. Tokumaru
Remei Satellite Observation Database	M. Hirahara
Coordinated Magnetic Data Along 210° Magnetic Meridian (Moshiri, Rikubetsu, Kagoshima, and Overseas MM Stations)	K. Shiokawa
Database of the Optical Mesosphere Thermosphere Imagers	K. Shiokawa
ELF/VLF Wave Data	K. Shiokawa

Name	Contact Person
ISEE Riometer Network Database	K. Shiokawa
All-Sky Auroral Data (Canada, Alaska, and Siberia)	K. Shiokawa, Y. Miyoshi
VHF Radar/GPS Scintillation (Indonesia)	Y. Otsuka
EISCAT Database	S. Nozawa, S. Oyama
SuperDARN Hokkaido Pair of (HOP) Radars Database	N. Nishitani
Cloud Resolving Storm Simulator (CReSS)	K. Tsuboki
Atmospheric Composition Data by FT-IR Measurements (Moshiri and Rikubetsu)	T. Nagahama
NO ₂ and O ₃ Data by UV/Visible Spectrometer Measurements (Moshiri and Rikubetsu)	T. Nagahama
Satellite Data Simulator Unit (SDSU)	H. Masunaga
Energy Flux Diagnosis Code for Atmospheric and Oceanic Waves	H. Aiki

■ Facilities

Name	Contact Person
CIDAS System	S. Masuda, T. Umeda, Y. Miyoshi
Ion/Electron Beamline and Calibration Facility	M. Hirahara
Clean Room Facility for Instrument Development	M. Hirahara
CHN Analyzer, Isotope Ratio Mass Spectrometer	Y. Mino
Tandem Accelerator Mass Spectrometry	H. Kitagawa, M. Minami
Electron Probe Microanalyzer (EPMA)	T. Kato
X-Ray Fluorescence Spectrometer (XRF)	T. Kato
X-Ray Diffractometer (XRD)	T. Kato
Facilities at Moshiri Observatory	A. Mizuno
Facilities at Rikubetsu Observatory	A. Mizuno
Facilities at Kiso Station	M. Tokumaru
Facilities at Fuji Observatory	M. Tokumaru
Facilities at Kagoshima Observatory	K. Shiokawa

6. Governance

As of March 31, 2022

Advisory Board

Masaki Fujimoto	Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency
Tohru Hada	Interdisciplinary Graduate School of Engineering Sciences, Kyushu University
Masahiro Hoshino	Graduate School of Science, The University of Tokyo
Hironobu Hyodo	Research Institute of Frontier Science and Technology, Okayama University of Science
Mamoru Ishii	Radio Propagation Research Center, Radio Research Institute, National Institute of Information and Communications Technology
Takaaki Kajita	Institute for Cosmic Ray Research, The University of Tokyo
Takeshi Kawano	Japan Agency for Marine-Earth Science and Technology
Takuji Nakamura	National Institute of Polar Research, Research Organization of Information and Systems
Nobuko Saigusa	Earth System Division, National Institute for Environmental Studies
Yukari N. Takayabu	Atmosphere and Ocean Research Institute, The University of Tokyo
Makoto Taniguchi	Research Institute for Humanity and Nature, National Institutes for the Humanities
Junichi Watanabe	National Astronomical Observatory of Japan, National Institutes of Natural Sciences
Mamoru Yamamoto	Research Institute for Sustainable Humanosphere, Kyoto University
Hisayoshi Yurimoto	Faculty of Science, Hokkaido University
Tatsuya Suzuki	Graduate School of Engineering, Nagoya University
Urumu Tsunogai	Graduate School of Environmental Studies, Nagoya University
Tomohiko Watanabe	Graduate School of Science, Nagoya University
Masafumi Hirahara	Institute for Space–Earth Environmental Research, Nagoya University
Tetsuya Hiyama	Institute for Space–Earth Environmental Research, Nagoya University
Yoshitaka Itow	Institute for Space–Earth Environmental Research, Nagoya University
Hiroyuki Kitagawa	Institute for Space–Earth Environmental Research, Nagoya University
Kazuo Shiokawa	Institute for Space–Earth Environmental Research, Nagoya University
Nobuhiro Takahashi	Institute for Space–Earth Environmental Research, Nagoya University
Munetoshi Tokumaru	Institute for Space–Earth Environmental Research, Nagoya University

Collaborative Research Committee

Yoichiro Hanaoka	National Astronomical Observatory of Japan, National Institutes of Natural Sciences
Atsushi Higuchi	Center for Environmental Remote Sensing, Chiba University
Akira Kadokura	Polar Environment Data Science Center, Joint Support-Center for Data Science Research, Research Organization of Information and Systems
Yoshiya Kasahara	Emerging Media Initiative, Kanazawa University
Chihiro Kato	Faculty of Science, Shinshu University
Kazuyuki Kita	College of Science, Ibaraki University
Yoko S. Kokubu	Tono Geoscience Center, Japan Atomic Energy Agency
Yuki Kubo	Radio Research Institute, National Institute of Information and Communications Technology
Takashi Minoshima	Research Institute for Value-Added-Information Generation, Japan Agency for Marine-Earth Science and Technology
Akihiko Morimoto	Center for Marine Environmental Studies, Ehime University
Takeshi Sakanoi	Graduate School of Science, Tohoku University
Kimikazu Sasa	Physics, Faculty of Pure and Applied Sciences, University of Tsukuba
Kanako Seki	Graduate School of Science, The University of Tokyo
Iku Shinohara	Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency
Hiroyuki Yamada	Faculty of Science, University of the Ryukyus
Hidenori Aiki	Institute for Space–Earth Environmental Research, Nagoya University
Takenori Kato	Institute for Space–Earth Environmental Research, Nagoya University
Kanya Kusano	Institute for Space–Earth Environmental Research, Nagoya University
Satoshi Masuda	Institute for Space–Earth Environmental Research, Nagoya University
Hirohiko Masunaga	Institute for Space–Earth Environmental Research, Nagoya University
Yutaka Matsubara	Institute for Space–Earth Environmental Research, Nagoya University
Masayo Minami	Institute for Space–Earth Environmental Research, Nagoya University
Masahito Nosé	Institute for Space–Earth Environmental Research, Nagoya University
Yuichi Otsuka	Institute for Space–Earth Environmental Research, Nagoya University
Taro Shinoda	Institute for Space–Earth Environmental Research, Nagoya University
Kazuo Shiokawa	Institute for Space–Earth Environmental Research, Nagoya University
Nobuhiro Takahashi	Institute for Space–Earth Environmental Research, Nagoya University
Munetoshi Tokumaru	Institute for Space–Earth Environmental Research, Nagoya University
Takayuki Umeda	Institute for Space–Earth Environmental Research, Nagoya University

Joint Research Technical Committee**Integrated Studies Technical Committee**

Ayumi Asai	Graduate School of Science, Kyoto University
Hirohisa Hara	National Astronomical Observatory of Japan, National Institutes of Natural Sciences
Yuto Katoh	Graduate School of Science, Tohoku University
Kanako Seki	Graduate School of Science, The University of Tokyo
Iku Shinohara	Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency
Akimasa Yoshikawa	Graduate School of Sciences, Kyushu University
Kanya Kusano	Institute for Space–Earth Environmental Research, Nagoya University
Satoshi Masuda	Institute for Space–Earth Environmental Research, Nagoya University
Yoshizumi Miyoshi	Institute for Space–Earth Environmental Research, Nagoya University
Takayuki Umeda	Institute for Space–Earth Environmental Research, Nagoya University

Heliospheric and Cosmic-Ray Research Technical Committee

Yoichiro Hanaoka	National Astronomical Observatory of Japan, National Institutes of Natural Sciences
Chihiro Kato	Faculty of Science, Shinshu University
Tatsumi Koi	College of Engineering, Chubu University
Shuichi Matsukiyo	Interdisciplinary Graduate School of Engineering Sciences, Kyushu University
Tomoko Nakagawa	Faculty of Engineering, Tohoku Institute of Technology
Yasuhiro Nariyuki	Faculty of Human Development, University of Toyama
Yoshitaka Itow	Institute for Space–Earth Environmental Research, Nagoya University
Kazumasa Iwai	Institute for Space–Earth Environmental Research, Nagoya University
Yutaka Matsubara	Institute for Space–Earth Environmental Research, Nagoya University
Munetoshi Tokumaru	Institute for Space–Earth Environmental Research, Nagoya University

Ionospheric and Magnetospheric Research Technical Committee

Yoshiya Kasahara	Emerging Media Initiative, Kanazawa University
Hiroyuki Nakata	Graduate School of Engineering, Chiba University
Shin Suzuki	Faculty of Regional Policy, Aichi University
Fuminori Tsuchiya	Graduate School of Science, Tohoku University
Masahito Nosé	Institute for Space–Earth Environmental Research, Nagoya University
Satonori Nozawa	Institute for Space–Earth Environmental Research, Nagoya University
Yuichi Otsuka	Institute for Space–Earth Environmental Research, Nagoya University

Meteorological, Atmospheric and Land-Ocean Ecosystem Research Technical Committee

Daisuke Goto	Center for Regional Environmental Research, National Institute for Environmental Studies
Atsushi Higuchi	Center for Environmental Remote Sensing, Chiba University
Masafumi Hirose	Faculty of Science and Technology, Meijo University
Akihiko Morimoto	Center for Marine Environmental Studies, Ehime University
Kenshi Takahashi	Research Institute for Sustainable Humanosphere, Kyoto University
Hiddenori Aiki	Institute for Space–Earth Environmental Research, Nagoya University
Hirohiko Masunaga	Institute for Space–Earth Environmental Research, Nagoya University
Akira Mizuno	Institute for Space–Earth Environmental Research, Nagoya University
Tomoo Nagahama	Institute for Space–Earth Environmental Research, Nagoya University

Chronological Research Technical Committee

Seiji Kadowaki	Nagoya University Museum
Yoko S. Kokubu	Tono Geoscience Center, Japan Atomic Energy Agency
Katsuyoshi Michibayashi	Graduate School of Environmental Studies, Nagoya University
Kimikazu Sasa	Physics, Faculty of Pure and Applied Sciences, University of Tsukuba
Motohiro Tsuboi	School of Biological and Environmental Sciences, Kwansei Gakuin University
Hiromi Yamazawa	Graduate School of Engineering, Nagoya University
Takenori Kato	Institute for Space–Earth Environmental Research, Nagoya University
Hiroyuki Kitagawa	Institute for Space–Earth Environmental Research, Nagoya University
Masayo Minami	Institute for Space–Earth Environmental Research, Nagoya University
Fusa Miyake	Institute for Space–Earth Environmental Research, Nagoya University

Airplane Usage Technical Committee

Kazuyuki Kita	College of Science, Ibaraki University
Makoto Koike	Graduate School of Science, The University of Tokyo
Akihiko Kondo	Center for Environmental Remote Sensing, Chiba University
Seiho Uratsuka	Radio Research Institute, National Institute of Information and Communications Technology
Hiroyuki Yamada	Faculty of Science, University of the Ryukyus
Taro Shinoda	Institute for Space–Earth Environmental Research, Nagoya University
Hiroyasu Tajima	Institute for Space–Earth Environmental Research, Nagoya University
Nobuhiro Takahashi	Institute for Space–Earth Environmental Research, Nagoya University

Steering Committee of the Center for International Collaborative Research

Yoichiro Hanaoka	National Astronomical Observatory of Japan, National Institutes of Natural Sciences
Akihiko Morimoto	Center for Marine Environmental Studies, Ehime University
Akinori Saito	Graduate School of Science, Kyoto University.
Wallis Simon	Graduate School of Science, The University of Tokyo
Joji Isizaka	Institute for Space–Earth Environmental Research, Nagoya University
Nozomu Nishitani	Institute for Space–Earth Environmental Research, Nagoya University
Kazuo Shiokawa	Institute for Space–Earth Environmental Research, Nagoya University

Steering Committee of the Center for Integrated Data Science

Hiroshi Hidaka	Graduate School of Environmental Studies, Nagoya University
Masahiro Hoshino	Graduate School of Science, The University of Tokyo
Ichiro Ide	Mathematical and Data Science Center, Nagoya University
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Shin-ichiro Shima	Graduate School of Information Science. University of Hyogo
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Yoshizumi Miyoshi	Institute for Space–Earth Environmental Research, Nagoya University
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Steering Committee of the Center for Orbital and Suborbital Research

Kazuyuki Kita	College of Science, Ibaraki University
Masato Nakamura	Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency
Riko Oki	Earth Observation Research Center, Space Technology Directorate I, Japan Aerospace Exploration Agency
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7. Finance

External Funding and Industry–Academia–Government Collaborations

Researches of ISEE members as principal investigator were supported by the following external funds.

Kakenhi category	Number of subjects	Total amount (JPY)
Grant-in-Aid for Scientific Research on Innovative Areas	1	2,860,000
Grant-in-Aid for Scientific Research (S)	3	115,440,000
Grant-in-Aid for Scientific Research (A)	8	79,040,000
Grant-in-Aid for Scientific Research (B)	10	43,940,000
Grant-in-Aid for Scientific Research (C)	5	6,890,000
Grant-in-Aid for Challenging Research (Exploratory)	10	24,050,000
Grant-in-Aid for Early-Career Scientists	6	7,800,000
Grant-in-Aid for Research Activity Start-up	3	4,160,000
Fund for the Promotion of Joint International Research (Fostering Joint International Research (B))	4	15,470,000
Grant-in-Aid for JSPS Fellows	1	1,690,000
Total	51	301,340,000

- Fifty-one research subjects listed in the table were supported by the JSPS Kakenhi.
- Twenty-five research subjects received total 143,896,264 JPY from governmental funds except KAKENHI, and from other universities and companies. Twelve of them were collaborative researches between ISEE and companies, or national institutes.
- Four research subjects received total 50,191,345 JPY of donation.

Libraries

■ Library, Solar-Terrestrial Sciences (ISEE Library #1)

Books

Japanese	3,026
Foreign	11,136

Journals

Japanese	47
Foreign	207

■ Library, Hydrospheric-Atmospheric Sciences (ISEE Library #2)

Books

Japanese	4,463
Foreign	8,863

Journals

Japanese	273
Foreign	249

Properties

	Site (m ²)	Buildings (m ²)	Location
Higashiyama Campus (Main campus of Nagoya University)	-	8,442	Aichi
Toyokawa Campus	94,212	1,461	Aichi
Moshiri Observatory	110,534	325	Hokkaido
Rikubetsu Observatory	24,580	167	Hokkaido
Kagoshima Observatory	13,449	287	Kagoshima
Fuji Observatory	19,926	174	Yamanashi
Sugadaira Station	3,300	0	Nagano
Kiso Station	6,240	66	Nagano
Total	272,241	10,922	