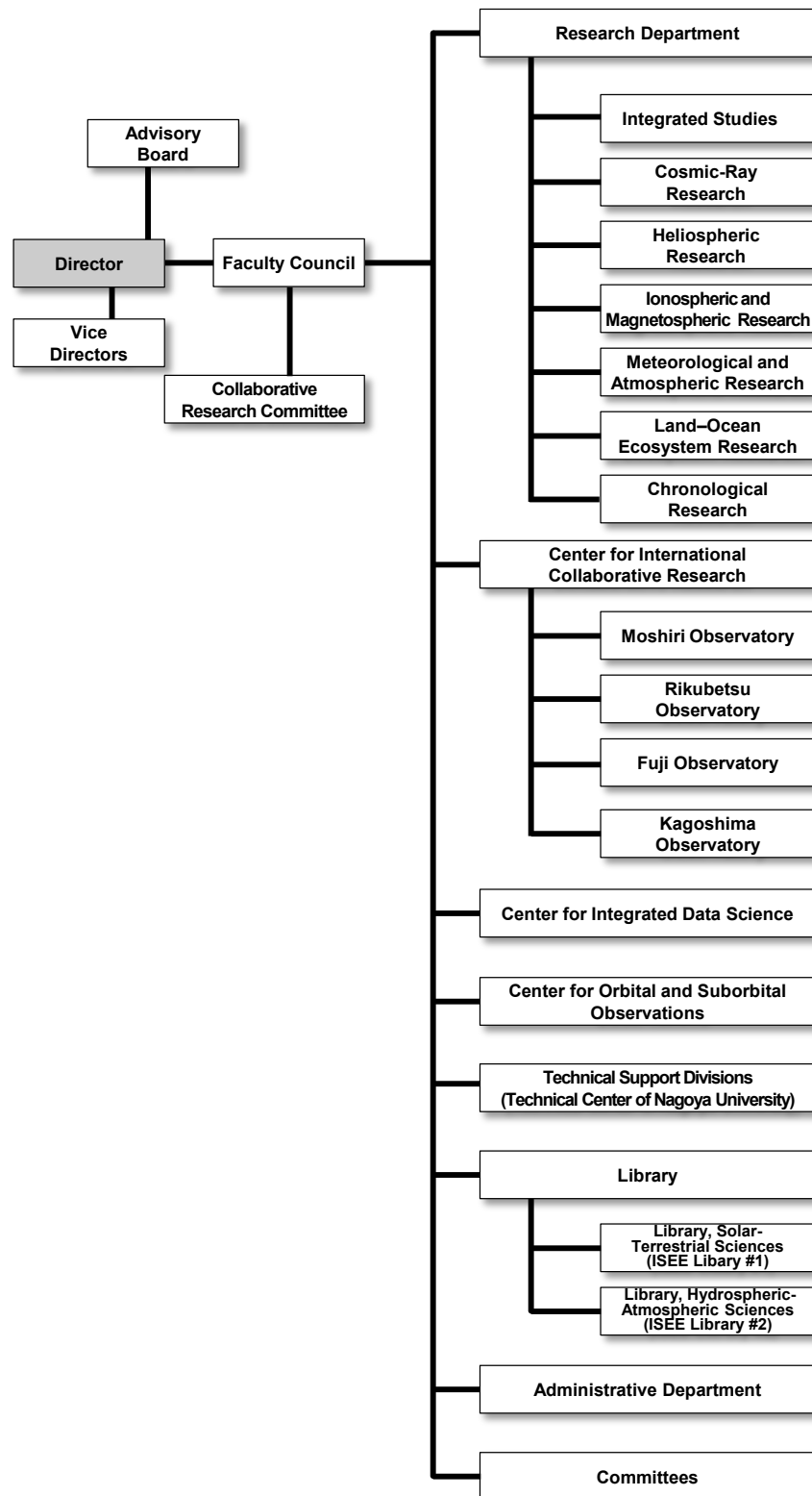


1. History

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 ¹⁴C 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 Directors Joji Ishizaka

Vice Directors Kazuo Shiokawa

April 1, 2018–March 31, 2019

* : Concurrent post

▲ : Left the Institute in the 2018 academic year

○ : Joined the Institute in the 2018 academic year

Division for Integrated Studies

Professor	Kanya Kusano
Professor	Yoshizumi Miyoshi (*)
Associate Professor	Satoshi Masuda
Associate Professor	Takayuki Umeda (*)
Designated Associate Professor	Shinji Saito ▲(*)
Lecturer	Shinsuke Imada
Assistant Professor	Akimasa Ieda
Researcher	Haruhisa Iijima
Researcher	Magnus Morton Woods ○▲
Research Institution Researcher	Shinnosuke Ishikawa ○▲

* Belongs to Graduate School of Science

Division for Cosmic-Ray Research

Professor	Yoshitaka Itow
Professor	Hiroyasu Tajima (*)
Associate Professor	Yutaka Matsubara
Associate Professor	Fumio Abe (*)
Associate Professor	Fusa Miyake
Lecturer	Akira Okumura
Assistant Professor	Hiroaki Menjo ○
Designated Assistant Professor	Shingo Kazama ○(*)
Researcher	Yoshinori Sasai ▲
Researcher	Qidong Zhou ○▲
Technical Assistant	Naoya Hidaka ○▲
Technical Assistant	Kazuhiro Huruta ○
Technical Assistant	Kinji Morikawa

* Belongs to Institute for Advanced Research Section

Division for Heliospheric Research

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

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 (*)
Lecturer	Shin-ichiro Oyama
Designated Lecturer	Masaki Nishino (*)
Designated Assistant Professor	Atsuki Shinbori
Researcher	Mitsuru Matsumura ▲
Research Institution Researcher	Neethal Thomas ▲
JSPS Research Fellowship	Shun IMAJO ○

* Belongs to Graduate School of Engineering

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	Tenpei Hashino ○▲
Researcher	Yange Deng ○
Researcher	Fumie Furuzawa
Technical Assistant	Minrui Wang ○
Technical Assistant	Yoshiki Fukutomi ▲

* Belongs to Institute for Advanced Research Section

Division for Land–Ocean Ecosystem Research

Professor	Joji Ishizaka
Professor	Tetsuya Hiyama (✳)
Associate Professor	Hidenori Aiki
Associate Professor	Naoyuki Kurita
Lecturer	Hatsuki Fujinami
Assistant Professor	Yoshihisa Mino
Researcher	Shun Ohishi
Researcher	Akiko Mizuno ○
Research Institution Researcher	Zhu Yuanli ▲
Research Institution Researcher	Qingyang Song ○
JSPS Research Fellowship	Yuki Kanno ○

Division for Chronological Research

Professor	Masaki Enami ▲
Professor	Hiroyuki Kitagawa
Associate Professor	Masayo Minami
Associate Professor	Takenori Kato (✳)
Assistant Professor	Hiroataka Oda
Researcher	Fumiko W. Nara
Research Institution Researcher	Masako Yamane
Designated Technical Staff	Masami Nishida
Designated Technical Staff	Yuriko Hibi

Center for International Collaborative Research

Director • Professor	Kazuo Shiokawa
Professor	Tetsuya Hiyama
Professor	Masaki Enami ▲(✳)
Professor	Akira Mizuno (✳)
Designated Professor (Cross Appointment)	Kimberly Dawn Leka
Designated Professor (Cross Appointment)	Lynn Marie Kistler
Associate Professor	Nozomu Nishitani
Associate Professor	Naoyuki Kurita (✳)
Associate Professor	Satonori Nozawa (✳)
Lecturer	Hatsuki Fujinami (✳)
Designated Assistant Professor	Masafumi Shoji
Designated Assistant Professor	Taro Nakai ▲
Designated Assistant Professor	Sung-Hong Park
Researcher	Hironari Kanamori

Foreign Visiting Research Fellow

Feb. 5 – July 31, 2018	Stephen Michael Playfer
Mar. 15 – June 14, 2018	Zhongping Lee
May 1 – July 31, 2018	Samuel Krucker
July 1 – Sept. 30, 2018	Nasreen Akter
Sept. 6 – Dec. 5, 2018	Daqing Yang
Jan. 15 – May 15, 2019	Vania Koleva Jordanova

Center for Integrated Data Science

Director • Professor	Kazuhisa Tsuboki
Professor	Yoshizumi Miyoshi
Professor	Joji Ishizaka (✳)
Professor	Kanya Kusano (✳)
Associate Professor	Fumio Abe
Associate Professor	Takayuki Umeda
Associate Professor	Takenori Kato
Associate Professor	Hidenori Aiki (✳)
Associate Professor	Satoshi Masuda (✳)
Associate Professor	Hirohiko Masunaga (✳)
Designated Associate Professor	Tomoaki Hori
Lecturer	Shinsuke Imada (✳)
Assistant Professor	Akimasa Ieda (✳)
Designated Assistant Professor	Satoshi Inoue
Designated Assistant Professor	Sachie Kanada
Designated Assistant Professor	Yasunori Tsugawa ○ ▲
Designated Assistant Professor	Tzu-Fang Chang ▲
Designated Assistant Professor	Mariko Teramoto ▲
Designated Assistant Professor	Takuma Matsumoto ▲
Researcher	Norio Umemura
Researcher	Masaya Kato
Researcher	Takafumi Kaneko
Researcher	Satoshi Kurita
Researcher	Satoki Tsujino ○ ▲
Researcher	Yoshiki Fukutomi ▲
Researcher	Yukie Moroda
Designated Technical Staff	Mariko Kayaba
Designated Technical Staff	Asayo Maeda
Designated Technical Staff	Takahiro Tsukamoto ▲
Technical Assistant	Takako Kondo ○
Technical Assistant	Hiroyasu Yonaha ○ ▲
JSPS Research Fellowship	Hidetaka Hirata

Center for Orbital and Suborbital Observations

Director • Professor	Nobuhiro Takahashi
Professor	Hiroyasu Tajima
Designated Professor	Hidetaka Tanaka ○
Designated Professor	Masataka Murakami
Professor	Joji Ishizaka (✳)
Professor	Kazuhisa Tsuboki (✳)
Professor	Masafumi Hirahara (✳)
Associate Professor	Taro Shinoda
Associate Professor	Hidenori Aiki (✳)
Designated Associate Professor	Kazutaka Yamaoka ○
Designated Assistant Professor	Hiroyuki Tomita
Designated Assistant Professor	Mayumi Yoshioka ○
Researcher	Jung Woonseon ▲
Researcher	Yutaka Matsumi ○
Researcher	Youko Yoshizumi ○
Designated Technical Staff	Tomoko Tanaka

Visiting Academic Staff/Visiting Faculty Members

Visiting Professor	Yoshiya Kasahara
Visiting Professor	Tomoomi Kumagai
Visiting Professor	Yoshikatsu Kuroda
Visiting Professor	Hiroyuki Shinagawa
Visiting Professor	Kiyoto Shibasaki
Visiting Professor	Kanako Seki
Visiting Professor	Park Hotaek
Visiting Professor	Yoshinobu Harazono
Visiting Associate Professor	Yasunobu Ogawa
Visiting Associate Professor	Ryouhei Kano ▲
Visiting Associate Professor	Daiko Shiota
Visiting Associate Professor	Iku Shinohara
Visiting Associate Professor	Manabu Shiraiwa ○ ▲
Visiting Associate Professor	Yasutaka Narusawa
Visiting Associate Professor	Hirohisa Hara ▲
	Toshio Nakamura

Technical Center of Nagoya University

Senior Technician	Akiko Ikeda
Senior Technician	Yasusuke Kojima
Senior Technician	Haruya Minda
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

Cooperating Research Fellow

Xiuchun Qin

Foreign Visiting Cooperation Researcher

May 1, 2018 – Mar.31, 2019	Christian Leipe
Aug. 6 – Sept. 29, 2018	Sergii Panasenکو
Sept. 1 – Dec. 30, 2018	Qurnia Wulan Sari
Oct.1 – Oct. 31, 2018	Alexandre Vasilyevich Koustov
Oct. 1 – Nov. 30, 2018	Kateryna D. Aksonova
Oct. 14 – Nov. 19, 2018	Vladimir Borisovich Belakhovsky
Nov. 19 – Dec. 18, 2018	Michael Jürgen Kosch
Dec. 3, 2018 – Feb. 27, 2019	Snedha Yadav
Jan. 7 – Mar. 8, 2019	Artem Yu. Gololobov
Jan. 15 – Mar. 31, 2019	Navin Parihar

Administration Department

Director, Administration Department	Sumio Murai ▲
General Affairs Division Manager, General Affairs Division	Kazuhiko Tsukazaki ▲
Senior Specialist, Research Support Office	Toshiyuki Yokoi ○
Specialist, General Affairs Section	Norishi Sugiyama ▲
Specialist, General Affairs Section	Keisuke Yokoe ○
Section Head, General Affairs Section	Seiji Tsuruta
Section Head, General Affairs Section	Kazuhiro Yokoyama ○
Section Head, General Affairs Section	Shoji Asano
Section Head, Personnel Affairs Section	Munetika Mizuno ○
Section Head, Research Support Office	Tadayosi Ito
Leader, General Affairs Section	Yoko Nokura
Administrator	Harumi Morishita ▲
Administrator	Anna Kato
Administrator	Yuka Suzuki
Accounting Division Manager, Accounting Division	Hiroyuki Ichioka
Specialist, Maintenance Section	Yoshiyuki Nakano
Section Head, Accounting Section	Noriaki Hiroi ▲
Section Head, Accounting Section	Masashi Shimamura ○
Section Head, Supplies Section	Kiyoko Hasegawa
Section Head, Maintenance Section	Shinichi Nakagawa
Leader, Accounting Section	Youko Yasui
Leader, Supplies Section	Yuka Matsuoka
Administrator	Yuka Ito
Administrator	Kyohei Yamaguchi ▲
Designated Supervisor	Tadashi Tsuboi

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	Journal of Oceanography	Editor-in-Chief
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	IUPAP C4	Committee member
Yoshitaka Itow	Professor	J-PARC Program Advisory Committee	Committee member
Yoshitaka Itow	Professor	Scientific evaluation of the Karlsruhe Institute of Technology Research field Matter	Panel member
Yoshitaka Itow	Professor	Telescope Array collaboration	Telescope Array External Advisory committee
Kanya Kusano	Professor	International Astronomical Union (IAU)	Organizing Committee Member of Commission E3 Solar Impact throughout the Heliosphere
Kanya Kusano	Professor	Solar Physics	Editorial Board member
Kazuo Shiokawa	Professor	Committee on Space Research (COSPAR)	Chair of the COSPAR Sub-Commission C1 (The Earth's Upper Atmosphere and Ionosphere)
Kazuo Shiokawa	Professor	Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)	Co-chair of the SCOSTEP VarSITI (Variability of the Sun and Its Terrestrial Impact)
Hiroyasu Tajima	Professor	B-factory Programme Advisory Committee	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	Integrated Land Ecosystem - Atmosphere Processes Study (ILEAPS), a core project of the Future Earth	Scientific Steering Committee (SSC) member
Akira Mizuno	Professor	NDACC Steering committee	Japanese Representative
Yoshizumi Miyoshi	Professor	Annales Geophysicae	Editor

Contact Post	Job Title	Organizations	Name of Committee / Title
Yoshizumi Miyoshi	Professor	Committee on Space Research (COSPAR)	Vice-chair of the Panel on Radiation Belt Environment Modeling (PRBEM)
Yoshizumi Miyoshi	Professor	Earth and Planetary Physics	Editor
Yoshizumi Miyoshi	Professor	Geophysical Research Letter	Guest Editor
Yoshizumi Miyoshi	Professor	National Science Foundation, Geospace Environment Modeling	Steering Committee Member
Yoshizumi Miyoshi	Professor	Polar Research	Guest Editor
Yoshizumi Miyoshi	Professor	Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)	Campaign coordinator of VarSITI/SPeCIMEN
Yoshizumi Miyoshi	Professor	Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)	Co-leader of the SCOSTEP VarSITI (Variability of the Sun and Its Terrestrial Impact)/SPeCIMEN (Specification and Prediction of the Coupled Inner-Magnetospheric Environment)
Michihiro Mochida	Professor	Atmospheric Environment	Member of Editorial Advisory Board
Michihiro Mochida	Professor	Atmospheric Research	Associate Editor
Michihiro Mochida	Professor	International Commission on Atmospheric Chemistry and Global Pollution (iCACGP)	Commission member
Masataka Murakami	Designated Professor	AMS	Chair, Ccommittee on Planned and Inadvertent Weather Modification
Masataka Murakami	Designated Professor	World Meteorological Organization (WMO)	Member of Weather Modification Expert Team
Hidenori Aiki	Associate Professor	American Meteorological Society (AMS)	Associate Editor of Journal of Atmospheric and Oceanic Technology (JAOT)
Yuichi Otsuka	Associate Professor	Journal of Astronomy and Space Sciences	Editor
Nozomu Nishitani	Associate Professor	Earth, Planets and Space (EPS)	Vice Editors-in-Chief
Nozomu Nishitani	Associate Professor	Earth, Planets and Space (EPS)	Guest Editor for the special issue of Global Data Systems for the Study of Solar-Terrestrial Variability
Nozomu Nishitani	Associate Professor	Earth, Planets and Space (EPS)	Guest Editor for the special issue of Recent Advances in MST and EISCAT/Ionospheric Studies – Special Issue of the Joint MST15 and EISCAT18 Meetings, May 2017
Nozomu Nishitani	Associate Professor	Super Dual Auroral Radar Network	Executive Council
Satonori Nozawa	Associate Professor	Earth, Planets and Space (EPS)	Guest editor for the special issue of the Recent Advances in MST and EISCAT/Ionospheric Studies – Special Issue of the Joint MST15 and EISCAT18 Meetings, May 2017

4. Committee of Other Organizations

Contact Post	Job Title	Organizations	Name of Committee / Title
Satonori Nozawa	Associate Professor	EISCAT Scientific Association	Council member
Masahito Nosé	Associate Professor	Earth, Planets and Space (EPS)	Editor
Masahito Nosé	Associate Professor	Earth, Planets and Space (EPS)	Guest Editor for the special issue of “The 13th International Conference on Substorms”
Masahito Nosé	Associate Professor	International Association of Geomagnetism and Aeronomy (IAGA)	Division V DAT Working Group, Chair
Hirohiko Masunaga	Associate Professor	World Climate Research Programme (WCRP) Global Energy and Water cycle Exchanges (GEWEX)	GEWEX Data and Assessments Panel (GDAP) member
Shin-ichiro Oyama	Lecturer	Committee on Space Research (COSPAR)	Science Organizing Committee
Toshio Nakamura	Visiting Faculty	Radiocarbon	Member of Editorial Board

5. Joint Research Programs

One of the major functions of ISEE is to promote and conduct collaborative research on Space–Earth Environmental Science together with researchers from universities and institutes outside ISEE. On January 14, 2016, ISEE was certified as a core research institution of Space–Earth Environmental Science, which is a “Joint Usage/Research Center” as defined by MEXT of Japan. We prepared application forms for joint research programs focusing on the following two research issues: the “Study of coupling processes in the solar–terrestrial system using ground-based observation network” and the “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. 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 10 research programs were prepared for the application during the 2018 Japanese fiscal year.

- 01) Joint Research Program (International)
- 02) ISEE International Joint Research Program (*)
- 03) ISEE/CICR 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

(*) Applicable only to foreign researchers

These collaborative research programs will be executed using the instruments, software/databases, and facilities of ISEE. Joint research programs 01) to 03), described above, will be managed by the Center for International Collaborative Research (CICR), and those of 07) and 08) will be managed by the Center for Integrated Data Science (CIDAS) and 09) –10) will be managed by the Division for Chronological Research.

In 2018, the following two events should be noted. First, the first ISEE symposium was held at Nagoya University during February 25–29, 2019, entitled “Recent progress in heliospheric physics by direct measurements of unexplored space plasmas”. Distinguished researchers in the fields of heliospheric and cosmic ray physics were invited from all over the world and recent research results were presented in the symposium. Second, the first ISEE Award was awarded to Professor Hisao Takahashi of INPE, Brazil, for his great contribution to space–earth environmental research through studies of ionospheric disturbances in the equatorial region. The award ceremony and memorial lecture were held at Nagoya University on February 27, 2019.

Lists of Accepted Proposals

■ ISEE International Joint Research Program

Proposer	Affiliation*	Job title*	Corresponding ISEE researcher	Title of the research program
Asgari-Targhi, M.	Harvard Smithsonian Center for Astrophysics	Astrophysicist	Fujiki, K.	Comparison of the MHD modeling of solar wind with IPS observations
Koustov, A.	University of Saskatchewan	Professor	Nishitani, N.	Polar cap auroras and related ionospheric plasma flows
Zharkova, V.	Northumbria University	Professor of Mathematics	Kusano, K.	Multi-wavelength diagnostics of energetic particles in solar flares
Panasenko, S. V.	Institute of ionosphere NAS and MES of Ukraine	Head of Department	Otsuka, Y.	Artificially induced traveling ionospheric disturbances inferred from GPS and radar data
Vladimir, B.	Polar Geophysical Institute, Murmansk, Russia	Scientific Researcher	Shiokawa, K.	The study of wave-particle interaction in a near-Earth space as observed by the ERG satellite and PGI ground-based instruments
Parihar, N.	Indian Institute of Geomagnetism	Reader	Shiokawa, K.	Study of the behaviour of the ionosphere over mid-latitude stations using OI 777.4 and 630.0 nm emission
Buranapratheprat, A.	Burapha University, Faculty of Science	Assistant Professor	Ishizaka, J.	Detection and modeling of green Noctiluca bloom in the Gulf of Thailand using satellite ocean color
Nitta, N.	Lockheed Martin Advanced Technology Center	Senior Staff Physicist	Masuda, S.	Origins of Eruptive and Other Solar Flares as Diagnosed with Energetic Electrons
Kosch, M. J.	South African National Space Agency	Chief Scientist	Nishitani, N.	New radar method to observe thermospheric neutral density
Valdés Galicia, J. F.	Instituto de Geofísica, Universidad Nacional Autónoma de México	Professor	Matsubara, Y.	Development of new and improved front end electronics for the SciBar Cosmic Ray Telescope
Tan, B.	National Astronomical Observatories, Chinese Academy of Sciences	Professor	Masuda, S.	Study of coronal magnetic fields from the joint observations of MUSER and NoRH
Savcheva, A.	Smithsonian-Astrophysical Observatory	Astrophysicist	Kusano, K.	Data-Driven Simulations of Active Region Eruptions

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

■ ISEE/CICR International Workshop

Proposer	Affiliation*	Job title*	Corresponding ISEE researcher	Title of the research program
Usoskin, I.	University of Oulu	Professor, Vice-director of ReSoLVE	Miyake, F.	Extreme solar events: How hostile can the Sun be?
Cheung, M.	Lockheed Martin Solar & Astrophysics Laboratory	Staff Physicist	Kusano, K.	Data-driven models of the solar progenitors of space weather and space climate
Seki, K.	The University of Tokyo	Professor	Imada, S.	International workshop on relations between solar evolution and atmospheric escape from terrestrial planets

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

List of Collaboration Resources

■ Instruments

Name	Contact Person
Fourier Transform Infrared (FTIR) Spectrometer for Atmospheric Composition Measurement (Rikubetsu)	T. Nagahama
Optical Mesosphere Thermosphere Imagers	K. Shiokawa
ISEE Magnetometer Network	K. Shiokawa
ELF/VLF Network	K. Shiokawa
Sodium LIDAR (Tromsø)	S. Nozawa
MF Radar (Tromsø)	S. Nozawa
Meteor Radar (Alta)	S. Nozawa
Solar Neutron Telescope (Norikura Observatory, Institute for Cosmic Ray Research, the University of Tokyo)	Y. Matsubara
Low-Background Beta-Ray Counter	N. Kurita
Multi-Station IPS Solar Wind Observation System (Toyokawa, Fuji, and Kiso)	M. Tokumaru
Nobeyama Radioheliograph	S. Masuda
Multi-Directional Cosmic Ray Muon Telescope (Nagoya)	F. Abe
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
ISEE Riometer Network	K. Shiokawa
Sea Spray Aerosol Optical Particle Counter	H. Aiki
Five-Wavelength Photometer (Tromsø)	S. Nozawa

■ Software/Databases

Name	Contact Person
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
Coordinated Magnetic Data Along 210° Magnetic Meridian (Moshiri, Rikubetsu, Kagoshima, and Overseas MM Stations)	K. Shiokawa
All-Sky Auroral Data (Canada, Alaska, and Siberia)	K. Shiokawa, Y. Miyoshi
Database of the Optical Mesosphere Thermosphere Imagers	K. Shiokawa
VHF Radar/GPS Scintillation (Indonesia)	Y. Otsuka
EISCAT Database	S. Nozawa, S. Oyama
ELF/VLF Wave Data	K. Shiokawa
Interplanetary Scintillation Data	M. Tokumaru
Solar Wind Speed Data	M. Tokumaru
Cosmic Ray Intensity Database	F. Abe

Name	Contact Person
MHD Simulation on the Magnetospheric Environment	T. Umeda
S-RAMP Database	F. Abe
CAWSES Database	F. Abe
Hinode Science Center, Nagoya University	K. Kusano
ERG Science Center	Y. Miyoshi
QL Plot Archive of Satellite Data for Integrated Studies	Y. Miyoshi
Remei Satellite Observation Database	M. Hirahara
MOA Database	F. Abe
SuperDARN Hokkaido Pair of (HOP) Radars Database	N. Nishitani
Numerical Simulation Codes for Plasma Kinetics	T. Umeda
Cloud Resolving Storm Simulator (CReSS)	K. Tsuboki
Satellite Data Simulator Unit (SDSU)	H. Masunaga
ISEE Riometer Network Database	K. Shiokawa
Energy Flux Diagnosis Code for Atmospheric and Oceanic Waves	H. Aiki

■ Facilities

Name	Contact Person
Computer System for Solar-Terrestrial Environmental Research (Supercomputer System)	F. Abe, T. Umeda
CHN Analyzer, Isotope Ratio Mass Spectrometer	Y. Mino
Tandem Accelerator Mass Spectrometry	H. Kitagawa, M. Minami
Electron Probe Microanalyzer (EPMA)	T. Kato
Ion/Electron Beamline and Calibration Facility	M. Hirahara
Clean Room Facility for Instrument Development	M. Hirahara
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
CIDAS System	S. Masuda, T. Umeda, Y. Miyoshi
X-Ray Fluorescence Spectrometer (XRF)	T. Kato
X-Ray Diffractometer (XRD)	T. Kato

ISEE Award

Winner	Title	Date of Award Ceremony
Hisao Takahashi Professor of post-graduate course, INPE, Brazil	Contribution to Space-Earth Environmental Research through Studies of Generation and Development of Equatorial Ionospheric Plasma Bubble	Feb. 27, 2019

6. Governance

As of Mar 31, 2019

Advisory Board

Mamoru Ishii	Space Environment Laboratory, Applied Electromagnetic 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
Nobuko Saigusa	Center for Global Environmental Research, National Institute for Environmental Studies
Yukari N. Takayabu	Atmosphere and Ocean Research Institute, The University of Tokyo
Takuji Nakamura	National Institute of Polar Research, Research Organization of Information and Systems
Tsuneto Nagatomo	Nara University of Education
Toru Hada	Interdisciplinary Graduate School of Engineering Sciences, Kyushu University
Hironobu Hyodo	Research Institute of National Sciences, Okayama University of Science
Masahiro Hoshino	Graduate School of Science, The University of Tokyo
Kazuhisa Mitsuda	Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency
Tetsuzo Yasunari	Research Institute for Humanity and Nature, National Institutes for the Humanities
Mamoru Yamamoto	Research Institute for Sustainable Humanosphere, Kyoto University
Junichi Watanabe	National Astronomical Observatory of Japan, National Institutes of Natural Sciences
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Collaborative Research Committee

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Shoichi Shibata	College of Engineering, Chubu University
Kanako Seki	Graduate School of Science, The University of Tokyo
Takashi Sekii	National Astronomical Observatory of Japan, National Institutes of Natural Sciences
Tsutomu Nagatsuma	Strategic Planning Office, National Institute of Information and Communications Technology
Yoichiro Hanaoka	National Astronomical Observatory of Japan, National Institutes of Natural Sciences
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Kanya Kusano	Institute for Space–Earth Environmental Research, Nagoya University
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Joint Research Technical Committee**Integrated Studies Technical Committee**

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Heliospheric and Cosmic-Ray Research Technical Committee

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Ionospheric and Magnetospheric Research Technical Committee

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Meteorological, Atmospheric and Land-Ocean Ecosystem Research Technical Committee

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Chronological Research Technical Committee

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Airplane Usage Technical Committee

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Steering Committee of the Center for International Collaborative Research

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7. Finance

External Funding and Industry–Academia–Government Collaborations

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

Kakenhi category	Number of subjects	Total amount (JPY)
Grant-in-Aid for Specially Promoted Research	1	61,880,000
Grant-in-Aid for Scientific Research on Innovative Areas	6	96,720,000
Grant-in-Aid for Scientific Research (S)	2	55,900,000
Grant-in-Aid for Scientific Research (A)	6	76,830,000
Grant-in-Aid for Scientific Research (B)	12	51,220,000
Grant-in-Aid for Scientific Research (C)	6	6,500,000
Grant-in-Aid for Challenging Exploratory Research	2	1,430,000
Challenging Research (Exploratory)	4	9,880,000
Grant-in-Aid for Young Scientists (A)	3	16,900,000
Grant-in-Aid for Young Scientists (B)	3	3,900,000
Early-Career Scientists	1	3,380,000
Grant-in-Aid for Publication of Scientific Research Results	2	2,600,000
Grant-in-Aid for JSPS Research Fellow	3	4,030,000
Fund for the Promotion of Joint International Research (International Group)	1	14,300,000
Fund for the Promotion of Joint International Research (Fostering Joint International Research (B))	3	10,010,000
Total	55	415,480,000

- fifty research subjects listed in the table were supported by the JSPS Kakenhi.
- Twenty-nine research subjects received total 144,458,194 JPY from governmental funds except KAKENHI, and from other universities and companies. eleven of them were collaborative researches between ISEE and companies, or national institutes.
- Six research subjects received total 6,359,160 JPY of donation.

Library

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

Book

Japanese	2,837
Foreign	11,128

Journals

Japanese	46
Foreign	207

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

Book

Japanese	4,695
Foreign	8,892

Journals

Japanese	246
Foreign	224

Properties

	Site (m ²)	Bulidings (m ²)	Location
Higashiyama Campus (Main campus of Nagoya University)	-	9,005	Nagoya
Toyokawa Campus	158,002	7,189	Toyokawa
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	336,031	17,213	