The Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)
ANNUAL REPORT (1 JANUARY – 31 DECEMBER 2023)

Prepared by Kazuo Shiokawa, SCOSTEP President

SCOSTEP is an Affiliated Body (thematic organization) of the International Science Council (ISC). Its long-term objectives include promoting international interdisciplinary programs of finite duration in solar-terrestrial physics, specifically to:

- Develop and sustain student interest in Sun-Earth connections,
- Promote efficient exchange of data and information between solar and terrestrial scientists in all countries and regions,
- Seek projects and programs that cross over transitional boundaries of physical regions and focused scientific disciplines.

SCOSTEP is engaged in science, capacity building, and public outreach to achieve these objectives in cooperation with other scientific organizations and scientific unions of the ISC. These other organizations are the Participating Bodies of SCOSTEP. These include COSPAR, IAGA/IUGG, IAMAS/IUGG, IAU, IUPAP, SCAR, URSI and WDS. The SCOSTEP Bureau consists of representatives of all of these scientific bodies, making it a truly interdisciplinary body.

The report that follows covers the period of 1 January to 31 December 2023. It reflects the activities carried out by the organization and its scientific programs. The year 2023 was the recovery time of the worldwide COVID pandemic. SCOSTEP continued to reach out to the solar-terrestrial physics community by participating in and hosting programs; providing grant opportunities for meetings, workshops, database development; the launch of a series of online seminars; and the SCOSTEP Visiting Scholar program. SCOSTEP also held its annual awards program for Distinguished Service Award. Election of the SCOSTEP officers (President and Vice President) was held at the General Council meeting in July 2023.

This report provides details on these activities carried out in the year 2023. All of these events and opportunities were communicated to the SCOSTEP scientific community via the SCOSTEP Newsletters and public announcements on relevant scientific community mailing lists including the scostep-all mailing list which contains ~2800 scientists of solar-terrestrial physics in more than 70 countries and regions.

1. SCOSTEP EXECUTIVES AND BUREAU MEMBERS

The SCOSTEP Executives for the period 2019-2023 (before 14 July 2023) include:
President: Dr. Kazuo Shiokawa, ISEE, Nagoya University, Japan

Vice President: Dr. Daniel Marsh, NCAR (USA) and University of Leeds (UK)
Past President: Dr. Nat Gopalswamy, NASA, USA
Scientific Secretary: Keith Groves, Boston College, USA

At the SCOSTEP General Council Meeting on July 14, 2023, the President, Dr. Kazuo Shiokawa was re-elected as the President. Dr. Daniel Marsh stepped down, and Dr. Bernd Funke was elected as the new Vice President. As the result, the SCOSTEP Executives for the period 2023-2027 after 14 July 2023 are:
President: Dr. Kazuo Shiokawa, ISEE, Nagoya University, Japan
Vice President: Dr. Bernd Funke, IAA, CSIC, Spain
Past President: Dr. Nat Gopalswamy, NASA, USA
Scientific Secretary, Keith Groves, Boston College, USA

The SCOSTEP Bureau is comprised of the Executives named above together with representatives of SCOSTEP participating organizations. The representatives are appointed by the Secretary General of their organizations. In 2023, the Bureau members representing their organizations include: Yoshizumi Miyoshi (COSPAR), Renata Lukianova (IAGA/IUGG), Peter Pilewskie (IAMAS), Kyung-Suk Cho (before September 2023) and Valery Nakariakov (after October 2023) (IAU), Pravata Kumar Mohanty (before November 2023) and Cristina Mandrini (after December 2023) (IUPAP), Lucilla Alfonsi (SCAR), Jorge Chau (URSI) and Mamoru Ishii (WDS).

The SCOSTEP Bureau directs the scientific, administrative, and financial activities of SCOSTEP. The Bureau meets at least once annually. In 2023, the SCOSTEP Bureau met three times on 11 July (hybrid of onsite/online), 26 October (online), and 21 December (online).

2. NEW MEMBER COUNTRIES OF SCOSTEP

In 2023, Bureau received applications to become new members of SCOSTEP from Rwanda (July 2023) and Italy (November 2023). The Bureau recommended them to the SCOSTEP council. After the vote by the Council, Rwanda (Category I) and Italy (Category II) have become new members of SCOSTEP from August 2023 and December 2023, respectively.

3. CAPACITY BUILDING AND OUTREACH ACTIVITIES

SCOSTEP is actively involved in the advancement of Capacity Building and scientific excellence through its scientific programs and partnerships with the ISWI, ISC and participating bodies of SCOSTEP. Through its initiatives, e.g. Workshops and Schools, SCOSTEP Visiting Scholar (SVS), and online capacity building lectures, SCOSTEP facilitates the training, interaction and collaboration of young and early career scientists with the best of the STP scientific community.

3.1 WORKSHOPS AND SCHOOLS

Each year, SCOSTEP supports a number of workshops and schools. SCOSTEP support for these activities are used to support travel and subsistence for participants from developing countries. In

the year of 2023, SCOSTEP has supported the following 4 schools in Portugal, China, Nigeria, and Zambia. Detailed reports of these schools are shown in the SCOSTEP/PRESTO Newsletters (https://scostep.org/newsletter-archive) and the websites of each school.

(1) 3rd Iberian Space Science Summer School (i4s), 26-30 June 2023, University of Coimbra, Portugal (https://www.i4s-iberian-space-science-summer-school.com/)

3rd Iberian Space Science Summer School

(2) The 2023 IMCP Space Weather School, 14-23 September 2023, National Space Science Center, Chinese Academy of Sciences, Beijing, China (http://imcp.ac.cn/en/coop/2023IMCP/anno/xs1)

The 2023 IMCP Space Weather School

(3) The International Space Weather Initiative School, 26-20 September 2023, Grand Palace Hotel in the city of Lusaka, Zambia (https://iswi-secretariat.org/iswi-space-weather-school-zambia-2023/)

(4) COSPAR Capacity Building Workshop: Solar-Terrestrial Coupling Processes and Space Weather, 9–20 October 2023, University of Lagos, Nigeria

3.2 SCOSTEP VISITING SCHOLAR (SVS) PROGRAM

The objective of the SVS program is to provide training to graduate students from developing countries in established laboratories of solar-terrestrial physics for periods of 1 to 3 months. Eligibility for the SVS program is open to applicants from all countries but with an emphasis on applicants from developing countries. The program is open to Masters and PhD students with the requirement that the recipient has not received a PhD at the time of application to the program. SCOSTEP supports round-trip ticket for the students and the host institutions support cost to stay for 1-3 months for these students.

In 2023, SCOSTEP received 16 proposals and awarded the following 15 SVS awards.

	Name	Home Institute	Host Institute
1	George Ochieng Ondede	Department of Astronomy and space Sciences, School of Physics and Space Sciences, The Technical University of Kenya	Institute for Space-Earth Environmental Research (ISEE), Nagoya University
2	Chandan Kapil	Indian Institute of Geomagnetism, Navi Mumbai, India	Leibniz Institute of Atmospheric Physics, Germany
3	Akshay Shivaji Patil	Sanjay Ghodawat University, Kolhapur, India	Institute for Space-Earth Environmental Research (ISEE), Nagoya University
4	Ashish P. Jadhav	Indian Institute of Geomagnetism, Navi Mumbai, India	Leibniz Institute of Atmospheric Physics, Germany
5	Kshitiz Upadhyay	Physical Research Laboratory, Ahmedabad, India	Institute for Space-Earth Environmental Research (ISEE), Nagoya University
6	Lalitha G Krishnan	Space Physics Laboratory, Vikram Sarabhai Space Centre, Thiruvananthapuram, India	Institute for Space-Earth Environmental Research (ISEE), Nagoya University

7	Yoshita Baruah	Department of Physical Sciences and Center of Excellence in Space Sciences India (CESSI), Indian Institute of Science Education and Research (IISER), Kolkata, India	NASA Goddard Space Flight Center (NASA/GSFC)
8	Akash Biswas	Department of Physics, Indian Institute of Technology (BHU), Varanasi, India	NASA Goddard Space Flight Center (NASA/GSFC)
9	Manu Varghese	Institute of Space Sciences, Shandong University, China	Institute for Space-Earth Environmental Research (ISEE), Nagoya University
10	TRAORE Ibrahim	University Norbert Zongo in Koudougou	Institute for Research in Astrophysics and Planetology (IRAP), Toulouse, France
11	Oluwaseun Victoria Fatoye	Anchor University Centre for Space Research (CESPAR), Lagos, Nigeria	South Africa National Space Agency (SANSA)
12	Ardra Kozhikottuparambi	(until Jun. 2022) National Institute of Technology(NIT), Tiruchirappalli, Tamil Nadu, India (from Sep. 2023) University of Warwick, UK	Institute for Space-Earth Environmental Research (ISEE), Nagoya University
13	Rajesh Kumar Barad	Indian Institute of Geomagnetism, New Panvel, Navi Mumbai, India	Institute for Space-Earth Environmental Research (ISEE), Nagoya University
14	Florian Günzkofer	German Aerospace Center (DLR) - Institute for Solar-Terrestrial Physics, Neustrelitz, Germany	Kyushu University
15	Prateek Mayank	Indian Institute of Technology Indore, Madhya Pradesh, India	South African National Space Agency (SANSA)

This is a very competitive program of SCOSTEP. As such, we invite worldwide laboratories to consider hosting students in the future. SCOSTEP provides the airfare for SVS awardees. The host laboratory is responsible for living expenses, visa fees, and other incidentals. For more

information, contact Dr. Kazuo Shiokawa (shiokawa at nagoya-u.jp) or Dr. Keith Groves (keith.groves at bc.edu).

The full requirements together with the application procedure and list of host laboratories are available on the website: https://scostep.org/svs/

3.3 SCOSTEP ONLINE CAPACITY BUILDING LECTURES

SCOSTEP is holding online lectures for capacity building of students and young scientists since January 2021 during and after the COVID-19 pandemic. These online lectures provide both basic background and an introduction to the latest scientific topics of solar-terrestrial physics to students and young scientists of all countries. Their duration will be one hour and presented by one speaker.

There were three online capacity-building lectures (17^{th}-19^{th}) in 2023 as follows. The numbers at the end shows the numbers of real-time participants/registration. The recorded video of the lectures is available from the SCOSTEP website at https://scostep.org/capacity-building-lectures/.

#17 Topic: Geospace Exploration Project: ERG/Arase: Recent highlights
Speaker: Yoshizumi Miyoshi, ISEE, Nagoya University, Japan
Date and Time: June 30 (Fri), 2023, 08:30-09:30 UTC (27/92)

#18 Topic: Solar magnetic field and cycle: from understanding to making prediction
Speaker: Bidya Binay Karak, Indian Institute of Technology (BHU), Varanasi, India
Date and Time: July 24 (Mon), 2023, 08:00-09:00 UTC (61/122)

#19 Topic: Unveiling the Nature of Solar Plumes: Insights from Ground and Space Observations
Speaker: Kyung-Suk Cho (Korea Astronomy and Space Science Institute, Daejeon, South, Korea
Date/time: September 21 (Thu), 2023, 09:00-10:00 UTC (42/98)

4. SCOSTEP's CURRENT SCIENTIFIC PROGRAM – PRESTO

The SCOSTEP's scientific program PRESTO (Predictability of the Variable Solar-Terrestrial Coupling) is going on for the interval of 2020-2024. PRESTO is a science program that seeks to improve the predictability of energy flow in the integrated Sun-Earth system on times scales from a few hours to centuries through promoting international collaborative efforts. PRESTO is sponsored by SCOSTEP. SCOSTEP is the only organization dealing with the coupled solar-terrestrial system under the umbrella of the International Science Council (ISC). PRESTO is the latest program of SCOSTEP in the modern space era, following a number of programs such as CAWSES (2004-2008), CAWSES-II (2009-2013) and VarSITI (2014-2018).

The PRESTO program organizes/supports meetings and database developments. SCOSTEP distribute SCOSTEP/PRESTO Newsletter every three months. SCOSTEP/PRESTO online seminar is also organized to deliver the latest scientific topics and/or instructive review presentations of solar-terrestrial physics that are related to the PRESTO Program.

4.1 PRESTO MEETINGS

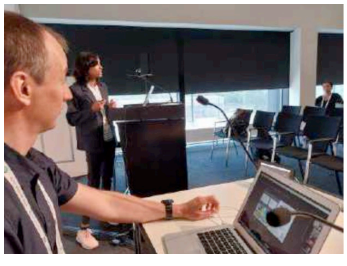
The first full face-to-face/in-person meeting of the PRESTO program was held as the ICTP-SCOSTEP-ISWI School and Workshop on 29 May 29 – 2 June 2023 at the Abdus Salam ICTP, Trieste, Italy. On the first day, the school was composed of six 1-hour lectures related to the three PRESTO Pillars. The 4-day workshop that followed the School had seven sessions: 1) Observations and modelling of solar eruptions, solar wind and SEPs from the Sun through the interplanetary space, 2) Prediction of solar transients, streams/SIRs and SEPs from the Sun to geospace, 3) Effect of space weather on the Earth's ionosphere, thermosphere, and magnetosphere system, 4) Influence of the lower atmosphere on the mesosphere, thermosphere, and ionosphere, 5) Solar forcing specification and impacts on the atmosphere and climate, 6) Precipitating energetic particles and their effects on atmosphere, and 7) Predictability of the solar cycle. Eighty-three participants from 39 countries and regions attended the school and workshop. The school and workshop were sponsored by the SCOSTEP/PRESTO program, ICTP, ISWI, ICG, Boston College, Japan Society for the Promotion of Science (JSPS) (core-to-core program for Asia-Africa platform), and ISEE, Nagoya University.

ICTP-SCOSTEP-ISWI School and Workshop. School participants (left) and workshop participants (right) .

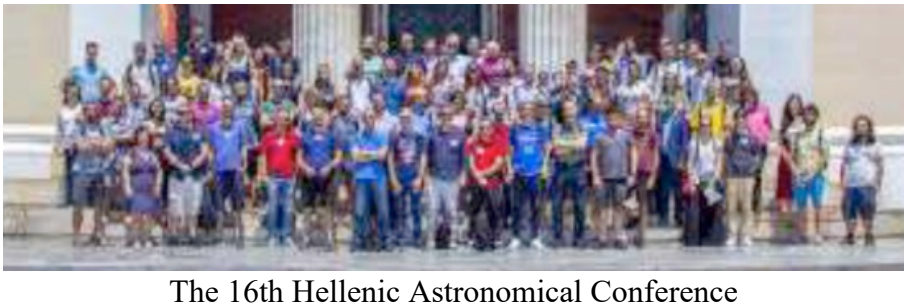
In addition, the following seven meetings were held in association with the PRESTO program. SCOSTEP financially supported these meetings.

Title	Location	Country	Date
The AGATA Kick-off meeting	Berlin, Germany (IUGG General Assembly venue)	Germany	12-Jul-23

The 16th Hellenic Astronomical Conference	The University of Athens	Greece	June 25-28, 2023
International Colloquium on Equatorial and Low Latitude Ionosphere (ICELLI 2023)	The University of Ilorin	Nigeria	18-22 September,2023
6th African Geophysical Society (AGS) International Conference on "Advancing Science & Technology in Developing Nations"	Grand Palace Hotel, Lusaka	Zambia	October 2-4, 2023
Space Weather and Upper Atmospheric Data analysis Training Workshop for East African Community	Muni University	Uganda	Oct.2-6, 2023
The 2023 Sun-Climate Symposium	Lowell Observatory	USA	October 16-20, 2023
The European Space Weather Week (ESWW)	Pierre Baudis Congress Centre	France	November 20-24, 2023

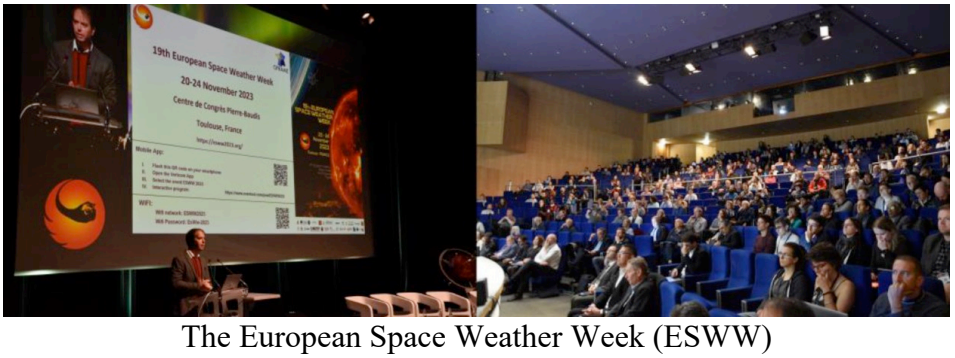
The AGATA Kick-off meeting



The 16th Hellenic Astronomical Conference

International Colloquium on Equatorial and Low-Latitude Ionosphere (ICELLI 2023)

The 2023 Sun-Climate Symposium



The European Space Weather Week (ESWW)

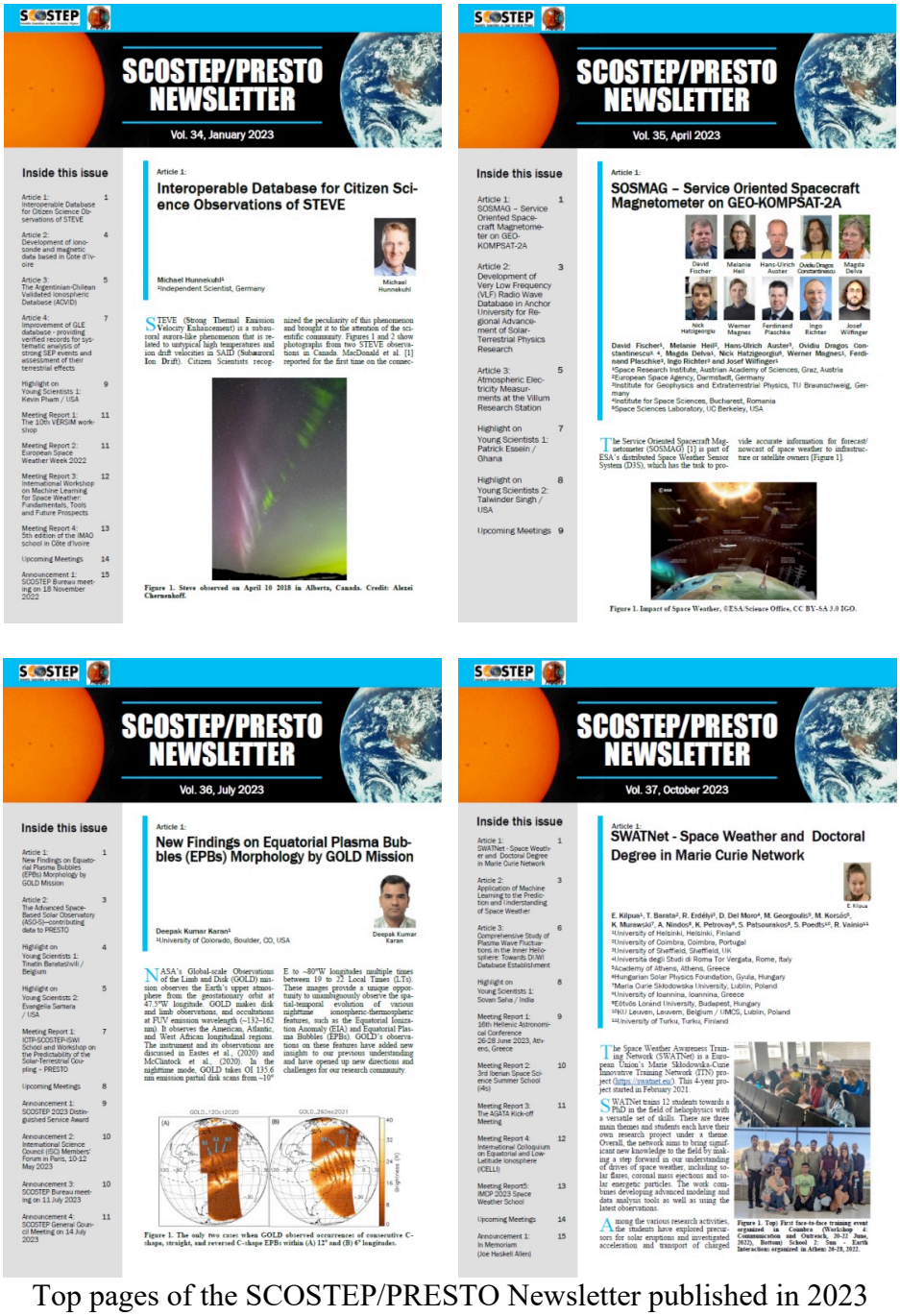
4.2 PRESTO DATABASE CONSTRUCTIONS

The following two databases were constructed in association with the PRESTO program. SCOSTEP financially supported these database constructions.

Title	Location of the Event	Country
Install the first Solar Dynamics Observatory (SDO) database in the Southern Hemisphere	Optical Data Centre https://astronomyaustralia.org.au/blog/portfolio/odc/	Australia
An Investigation of Properties of the Coronal Holes Producing HSSs InProCH	The Astronomical Institute of the Romanian Academy	Romania

4.3 SCOSTEP/PRESTO NEWSLETTERS

SCOSTEP has produced SCOSTEP/PRESTO Newsletters in 2023 every three months in January, April, July, and October. To access the newsletters, please visit the website: https://scostep.org/newsletter-archive/.



Top pages of the SCOSTEP/PRESTO Newsletter published in 2023

4.4 SCOSTEP/PRESTO ONLINE SEMINARS

Since May 2020, SCOSTEP/PRESTO have organized a series of online seminars that deliver the latest scientific topics and/or instructive review presentations of solar-terrestrial physics that are related to SCOSTEP's PRESTO Program. The seminars are open to scientists and students in all countries. The seminar speakers are invited by the PRESTO Steering Committee. They are widely announced through relevant mailing lists including the SCOSTEP-all mailing list and the SCOSTEP website at https://scostep.org. The length of the seminars are 60 minutes (maximum) including 15-minute question/discussion time using the Zoom meeting system. The seminars are only for scientific purposes and are not for commercial use.

The speakers featured in 2023 include the following. The numbers at the end shows the numbers of real-time participants/registration. The recorded video of the seminars is available from the SCOSTEP website at https://scostep.org/online-seminar-series/.

#16 Title: Atmospheric response to solar activity
Author: Dr. Annika Seppala (University of Otago, New Zealand)
Date/Time: April 19, 2023, 08:00-09:00UT (105/214)

#17 Title: From Earth to the Edge of Space: How Data Assimilation Advances the Science and Engineering of Forecasting Near Earth Space Environments
Author: Dr. Tomoko Matsuo (University of Colorado at Boulder, USA)
Date and Time: August 24, 2023, 13:00-14:00 UT (49/126)

#18 Title: Geo-effectiveness of interplanetary coronal mass ejections: How much can be affected due to their evolution in the heliosphere?
Author: Dr. Sergio Dasso (LAMP at Instituto de Astronomía y Física del Espacio, UBA-CONICET, Buenos Aires, Argentina)
Date and Time: October 26, 2023, 12:00-13:00 UT (68/144)

5. SCOSTEP GENERAL COUNCIL AND BUREAU MEETINGS

5.1 GENERAL COUNCIL MEETING

The SCOSTEP General Council Meeting was held at 1730-1900 CEST on 14 July 2023 at Room R13 in CityCube (IUGG venue) in Berlin, Germany and via online. After the opening remarks and approval of agenda, the minutes of the previous General Council Meeting (25 February 2022) was approved. Then, updates and status reports on SCOSTEP activities were reported by Kazuo Shiokawa (President) and Keith Groves (Scientific Secretary), i.e., SCOSTEP leadership updates of 2022–2023, SCOSTEP membership updates, new Scientific Discipline Representatives, Scientific Secretary Office updates, PRESTO Program updates, updates of ISC, UN_STSC, and UN_COPUOS activities, SCOSTEP Visiting Scholar (SVS) Program in 2022-2023, capacity

building schools supported by SCOSTEP in 2022-2023, SCOSTEP online capacity building lectures, SCOSTEP comic book updates, and SCOSTEP Awards 2022. Then the SCOSTEP Distinguished Service Award 2023 was given to Dr. Marianna Shepherd from the President. Then financial matters were explained from Keith Groves, i.e., SCOSTEP closing statements 2022, SCOSTEP budget details for 2022, 2023, and 2024 (anticipated), and membership fees. Then, application for the new SCOSTEP membership from Rwanda was discussed. Finally, election of new SCOSTEP executives for July 2023 – July 2027 were made by vote. The new President and Vice President were decided as Dr. Kazuo Shiokawa (continuation from the previous term) and Dr. Bernd Funke, respectively. A full copy of the minutes of the General Council meeting will be put on the SCOSTEP website at: https://scostep.org/meeting-minutes-archive/.

5.2 SCOSTEP BUREAU MEETING

Three SCOSTEP Bureau meeting were held in 2023 on 11 July, 26 October, and 21 December. The meeting was held virtually via a Zoom video conferencing, except for the one on 11 July (hybrid with the on-site meeting in Berlin (IUGG Venue)). The following items were discussed during these meetings.

Agenda of the Bureau meeting on 11 July 2023:

Discussion/Decision Items

1. Approval of the minutes of the last Bureau meeting
2. Updates of action items from the last Bureau meeting
3. Budget status (2022 final; 2023 status; 2024 plan)
4. Membership Committee report
5. Application for the new SCOSTEP membership (Rwanda)
6. SCOSTEP Fellow Procedures
7. WMO-ISES-COSPAR Space Weather Forum
8. Draft agenda of the General Council Meeting
9. Selection of the STP-16 venue (15:00-15:45 CEST)
10. Resolution of data exchange in IAGA and IUGG

Report Items

12. Selection status of new SDRs
13. Scientific Secretary (SS) Office Updates
14. Reports from participating bodies (COSPAR, IAGA, IAMAS, IAU, IUPAP, URSI, SCAR, WDS)
15. Updates of ISC, UN_STSC, UN_COPUOS, and ISWI activities
16. PRESTO updates
17. School activities supported by SCOSTEP
18. SCOSTEP online capacity building lectures
19. SCOSTEP Distinguished Service Award 2023
20. SCOSTEP Visiting Scholar (SVS) updates
21. SCOSTEP comic book updates

Agenda of the Bureau meeting on 26 October 2023:

Discussion/Decision Items

1. Approval of the minutes of the last Bureau meeting
2. Updates of action items from the last Bureau meeting
3. Letter from National Adherent Representatives (NARs): SDR balance issue
4. Letter from National Adherent Representatives (NARs): Possible constitution amendment for President/Vice President election
5. New committee member selection (Award Nomination, SVS Selection, Membership, Finance)
6. Comment during General Council on 14 July 2023 on membership fee
7. Committee for the Next Scientific Program Definition
8. Selection of the STP-16 venue
9. Budget status (2022 final; 2023 status; 2024 plan)
10. Membership Committee report

Report Items

11. SCOSTEP Fellow nomination updates
12. Scientific Secretary (SS) Office Updates
13. Reports from participating bodies (COSPAR, IAGA, IAMAS, IAU, IUPAP, URSI, SCAR, WDS)
14. Updates of ISC, UN_STSC, UN_COPUOS, and ISWI activities
15. PRESTO updates
16. School activities supported by SCOSTEP
17. SCOSTEP online capacity building lectures
18. SCOSTEP Visiting Scholar (SVS) updates
19. SCOSTEP comic book updates

Agenda of the Bureau meeting on 21 December 2023:

Discussion/Decision Items

1. Approval of the minutes of the last Bureau meeting
2. Updates of action items from the last Bureau meeting
3. Letter from National Adherent Representatives: SDR balance issue
4. Letter from National Adherent Representatives: Possible constitution amendment for President/Vice President election
5. Committee for the Next Scientific Program Definition
6. New committee member selection (Award Nomination, SVS Selection)
7. Membership application from Italy
8. STP-16 updates
9. Budget status (2022 final; 2023 status; 2024 plan)
10. Membership Committee report

Report Items

11. Update on the comment during General Council on 14 July 2023 on membership fee
12. SCOSTEP Fellow nomination updates
13. Scientific Secretary (SS) Office Updates

14. Reports from participating bodies (COSPAR, IAGA, IAMAS, IAU, IUPAP, URSI, SCAR, WDS)
15. Updates of ISC, UN_STSC, UN_COPUOS, and ISWI activities
16. PRESTO updates
17. School activities supported by SCOSTEP
18. SCOSTEP online capacity building lectures
19. SCOSTEP Visiting Scholar (SVS) updates
20. SCOSTEP comic book updates

Details of the minutes from these Bureau meetings are/will be available at https://scostep.org/.

6. 2023 SCOSTEP Awards

SCOSTEP was pleased to host a very successful award program in 2023, which is the Distinguished Service Award and SCOSTEP Fellow for 2023. These awards recognize the societal importance of studies in the field of solar-terrestrial physics and give credit to scientists who contribute significantly to these studies and to SCOSTEP activities. The awards include:

- SCOSTEP Distinguished Service Award - This award is given to recognize unique contributions to SCOSTEP activities and to realization of its programs and events.
- SCOSTEP Fellow - This award is given to honor notable members of the solar-terrestrial physics community who have made sustained and/or high-impact contributions to the science of solar-terrestrial physics and/or to SCOSTEP and its scientific programs.

SCOSTEP Award Nomination Committee and Award Selection Committee under the Bureau acted for nomination and selection of the award winners. After careful consideration, the SCOSTEP Award Selection Committee selected that the 2023 Distinguished Service Award is given to Dr. Marianna G. Shepherd, York University, Toronto, Canada, for her unique and meritorious service to SCOSTEP activities and interests at an international level, particularly for her work in the position of the Scientific Secretary of SCOSTEP.

The SCOSTEP Fellows are given to Dr. Natchimuthuk Gopalswamy, NASA Goddard Space Flight Center, Greenbelt, MD, USA, for his outstanding contributions to the scientific understanding of solar coronal mass ejections and their space weather consequences, as well as other areas of solar-terrestrial physics, and excellence in promoting international scientific collaboration as well as to Dr. Dr. Eugene Rozanov, Physikalisch-Meteorologisches Observatorium Davos, World Radiation Center (PMOD/WRC), Davos, Switzerland, for his outstanding scientific contributions to our understanding of solar-terrestrial interactions, via both direct and indirect mechanisms, including the role of energetic particle precipitation, ozone variability and solar irradiance variations.

Information about the awardee is included in the SCOSTEP/PRESTO Newsletter, Volume 36, July 2023 (SCOSTEP Distinguished Service Award) and Volume 38, January 2024. They are available on the website: https://scostep.org/newsletter-archive/.

Congratulations to the award winners!

7. OTHER BUSINESS

7.1 SCOSTEP AT UNITED NATIONS

SCOSTEP is a permanent observer of the United Nations (UN) Committee on the Peaceful Uses of Outer Space (COPUOS). On behalf of President, Past President of SCOSTEP, Dr. Nat Gopalswamy, provided a report at the 60th Session of the STSC (Scientific and Technical Subcommittee) of the UN COPUOS on 9 February 2023, about the current status of SCOSTEP and its PRESTO program for predictability of the variable solar-terrestrial coupling.

7.2 SCOSTEP COMIC BOOK UPDATES

The comic book has been translated into many languages (https://scostep.org/space-science-comic-books/). Some printed version of comic books will be distributed at the UN COPUOS STSC meeting in February 2023. A new comic book "What is Space Weather?!" has been newly published in Japanese and English in collaboration with the PBASE program under JSPS KAKENHI (22K21345) and the Institute for Space-Earth Environmental Research (ISEE), Nagoya University, Japan. A bubble version of this new comic book was provided to SCOSTEP for translation to other languages.

8. SUMMARY

In summary, the Scientific Committee on Solar-Terrestrial Physics (SCOSTEP) had a busy year in 2023. The year included PRESTO advancements with the first face-to-face PRESTO workshop in ICTP, Italy, and other in-person meetings, together with the highly popular series of online seminars. These activities and the Distinguished Service Award and SCOSTEP Fellows resulted in an active and productive year. SCOSTEP looks forward to continued success in 2024 which will be the final year of the PRESTO program as well as the year to define the program after PRESTO.

Common acronyms:

COSPAR	Committee on Space Research
CSIC	Consejo Superior de Investigaciones Científicas
IAA	Instituto de Astrofísica de Andalucía
IAGA	International Association of Geomagnetism and Aeronomy
IAMAS	International Association of Meteorology and Atmospheric Sciences
IAU	International Astronomical Union
ICTP	International Centre for Theoretical Physics
ISC	International Science Council
ISEE	Institute for Space-Earth Environmental Research
ISWI	International Space Weather Initiative
IUGG	International Union of Geodesy and Geophysics
IUPAP	International Union of Pure and Applied Physics
JSPS	Japan Society for the Promotion of Science
NASA	National Astronautics and Space Administration
NCAR	National Center for Atmospheric Research
PRESTO	Predictability of the Variable Solar-Terrestrial Coupling
SCAR	Scientific Committee on Antarctic Research
SCOSTEP	Scientific Committee on Solar-Terrestrial Phycis
STP	Solar-Terrestrial Physics
UN COPUOS STSC	United Nations (UN) Committee on the Peaceful Uses of Outer Space (COPUOS) Science and Technical Subcommittee (STSC)
URSI	International Union of Radio Science