

Scientific Committee on Solar-Terrestrial Physics 11 July 2023 – 1400-1700 CEST (12:00-15:00 UT) Hybrid meeting at room R5 in City Cube, IUGG venue in Berlin, Germany and via Zoom

Meeting Minutes Prepared by Keith Groves and Kazuo Shiokawa, 18 August 2023

On-site Attendees: Kazuo Shiokawa (President), Keith Groves (Scientific Secretary), Nat Gopalswamy (Past President), and Peter Pilewskie (IAMAS)

Online Attendee: Daniel Marsh (Vice President), Lucilla Alfonsi (SCAR, until ~14:30 CEST), Jorge Chau (URSI), Mamoru Ishii (WDS), Yoshizumi Miyoshi (COSPAR), Pravata Mohanty (IUPAP), Renata Lukianova (IAGA),

Note: A majority quorum was achieved.

Opening remarks by President (Kazuo Shiokawa)

The meetings were opened with a welcome from Kazuo. Kazuo showed the agenda of the meeting, which contains 11 discussion items and 11 report items. He estimated the meeting to last approximately 3 hours.

1. Approval of the Minutes from the last Bureau Meeting (held on 18 November 2022).

Kazuo provided a copy of the 18 November 2022 Bureau minutes in advance of the current meeting. He invited discussion of the minutes, but no discussion/correction was proposed. Then, Nat Gopalswamy (Nat) moved to approve the minutes and Dan Marsh (Dan) seconded. The minutes were unanimously approved by all the Bureau members.

2. Action Items

Table 1 shows an update of the action items from our last meeting in 18 November 2022. "Done" marks indicate the items that have been completed since our last meeting. Action items 1-15 were all done. The action 16 was not aware of any, so this action was closed.

Table 1: Update of Action Items

Summary of Actio	n Items from	18 Novembe	er 2022 Bureau Meeting
			shown with the responsible member for the action
			resident, SS: Scientific Secretary, B: Bureau Members; others will be identified by name.
	T	Т	Budget
Action 1	Done	SS	Sent reminder to the members who have not yet paid their 2022 subscriptions.
Action 2	Done	SS	check budget status and transfer the bank handling to the new secretary
			For Bylaws
Action 3	Done	P, SS	Open the SCOSTEP Bylaws webpage.
Action 4	Done	P, SS	Open the SCOSTEP Fellow webpage.
			SDR selection
Action 5	Done	P, SS	Ask Bureau members to propose the new SDR candidates with a deadline of 20 December. Then distribute the full list for voting.
			STP-16
Action 6	Done	P	Send e-mail to the two countries who have shown the intent to host the STP-16 in 2026 to prepare the full proposal by the next Bureau
			new membership
Action 7	Done	P, SS	send recommendation letter of two new countries to the Council for their approval.
			Award Selection Committee
Action 8	Done	P	Send e-mail to Award Selection Committee to ask whether they are willing to continue for the next four-year term
Action 9	Done	SS	Obtain agreement from the committee members who retires to open their names on the SCOSTEP web
Action 10 Done		P	Send e-mail to Award Selection Committee to ask additional task to make selection of SCOSTEP Fellows
			Conflict of Interest
Action 11	Done	SS	Send the form of the Conflict of Interest Statement to the Bureau members and obtain their signature by the end of the year.
			PRESTO workshop
Action 12	Done	SS	Ask Bruno Nava about the result of the selection of ICTP conference for the PRESTO Workshop 2023.
			Comic Book
Action 13	Done	SS	send printed version of comic book to UN-COPUOS for distribution at the STSC meeting.
			Election
Action 14	Done	SS	Prepare for the election of President and Vice President at the SCOSTEP Council at IUGG in 11-20 July 2023. The preparation should be
	1		started from call for nominations about half years before the council.
A -4: 15	+-	D.CC	Others N. D.
Action 15	Done	P, SS	Make Peru and Rwanda institutions into "Correspondents" until they become national representative.
Action 16	Close	P, SS	Approve affiliate members by Bureau.

3. SCAR report

Lucilla made a report on SCAR activities. Antarctic Geospace and ATmosphere reseArch (AGATA) is a new SCAR Program Planning Group (PPG), currently running to be approved as a new SCAR Scientific Research Programme (SRP). SRPs are high quality international research initiatives in Antarctic region (but also in a bi-polar context) endorsed by the SCAR's permanent Science Groups: Physical Sciencies, Geosciences and Life Sciences. Currently there are only three ongoing SRPs and none of them deals with SCOSTEP-related topics. AGATA first core membership, submission of AGATA PPG, constitution of governance, preparation of AGATA SRP proposal was done. As a next step, they will submit scientific research program to SCAR executive committee. The Kickoff meeting of AGATA will be held at IUGG on 12 July 12-13:30 CEST at room M6 level 3 at City Cube thanks to the support by SCAR and SCOSTEP/PRESTO funding.

4. Budget

Keith presented the Closing Statement in Net Assets for SCOSTEP as of 30 June 2023. The statement (shown in Table 2) displays the details of 2022 revenues and expenditures. Keith explained that membership fees are not yet received from several countries, and overall revenue will be lower in 2023 due to pre-payment and other geopolitical factors. The capacity building and scientific program expenditures are dominated by support to meetings; less data base activities so far in 2023. The SVS travel support is just underway; travel expenses have increased substantially relative to 2022 (> 20%). The total expenditure is \$79,024 at this halfway of the year 2023.

Table. 2 Statement of Operations and Net Assets – As of 30 June 2023

SCOSTEP - CLOSING STATEMENT AS OF 20230630				
ASSETS - at Beginning of the Year				
Cash		\$290,025		
Certificate of Deposit		\$100,000		
Total		\$390,025		
REVENUE				
Membership Fees from Adherents		\$9,405		
Other (CD Est. Interest)		\$1,500		
TOTAL		\$10,905		
EXPENDITURES				
Secretariat Expenses		\$5,870		
General Activities		\$1,661		
Capacity Building, Scientific Programs		\$65,000		
SVS Support		\$6,016		
Other Costs		\$477		
TOTAL		\$79,024		
SURPLUS (DEFICIT) FROM OPERATIONS (Rev-Exp)	\$	(68,119)		
CLOSING NET ASSETS		\$321,906		

The presentation continued with the SCOSTEP estimated budgets for 2023, actual budget for 2023, and estimated budget for 2024 (see Table 3). Some corrections of the amount were pointed out during the Bureau meeting, i.e., on the capacity building and education (\$37,150) and PRESTO program support (workshops/meetings). Table 3 is after the correction. There are 7 meetings and 2 database supports of the PRESTO program. For 2024 additional budget will be necessary to discuss the next scientific program after PRESTO.

The budget presentation ended with an update on the Adherent Subscriptions. Only a dozen nations have paid dues for 2023, since invoices were not sent until 1 May. Reminders will be sent this month to encourage payment. Overall revenues will not match 2022 as the USA paid a year ahead in 2022; geopolitical factors may also contribute to delinquency. We expect additional new members in 2023/24.

Table 3. SCOSTEP Budgets 2023 and 2024

	2023 Estimated Budget	2023 Actual Budget (through 20230630)	2024 Proposed Budget
Anticipated Income:	20230101 - 20231231	20230101 - 20230630	20240101-20241231
Adherent Membership Fees:	\$ 77,500	\$ 9,405	\$ 105,000
Interest (Certificate of Deposit)	\$ 3,000	\$ 1,500	\$ 3,000
Charitable Contributions	. ,	\$ -	,
Bank Carryover from Prior Year	\$ 261,000	\$ 290,025	\$ 192.125
Certificate of Deposit	\$ 100,000	\$ 100,000	\$ 100,000
Total Resources (income and assets)	, , , , , , , , , , , , , , , , , , , ,	\$ 400,930	\$ 400,125
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Secretariat Expenses			
Materials and Supplies	\$ 500	\$ -	\$ 500
Meetings and Meals (Bureau and other)	\$ 500		\$ 500
Accounting Fees (Annual Compilation/Tax Returns/Filing Fees)	\$ 1,850	\$ -	\$ 1,850
Consultant (non-profit compliance)	\$ 500	\$ -	\$ 1,270
Filing Fees 501c3 (Initial & Amendment)	\$0	\$0	\$0
Website Costs (Consultant, domain, annual fees)	\$ 150	\$ 371	\$ 150
Secretariat Office Grant in Aid (secretarial, website maintenance, IT support)	\$ 18,000	\$ 5,870	\$ 18,000
Bank wire and cash management fees (Incoming, Outgoing Wires; Fees)	\$ 675	\$ 406	\$ 675
Printing Materials (Comic Books, Brochures, Flyers)	\$ 200		\$ 200
Sub-total Expenses	\$ 22,375	\$ 6,647	\$ 23,145
General Activities			
Bureau Meetings (annual)	\$ 2,000	\$ -	\$ 2,000
Travel for Representation at ISC, UN and SCI. Meetings	\$ 5,000	\$ 1,361	\$ 5,000
Contingencies	\$ 1,000	\$ 1,501	\$ 1,000
Scientific Programs (Travel)	\$ 7,500	\$ -	\$ 7,500
STP Symposium Expenses (held every 4 years; next in 2026)	\$ -	\$ -	\$ 7,500
Award Expenses (Distinguished Science, Young Scientist and Service)	\$ 1,500	\$ -	\$ 1,500
Sub-total Expenses	+ -/	\$ 1,361	\$ 17,000
Consider Building Calcuttle Processes			
Capacity Building, Scientific Programs	6 25.000	6 45.000	6 25.000
Capacity Building and Education (Iberian, Versim, Sp Wx Wk)	\$ 25,000	\$ 15,000	\$ 25,000
Programs Support - SVS	\$ 25,000	\$ 6,016	\$ 25,000
PRESTO Program Support (workshops/meetings for Science Program)	\$ 25,000 \$ 25,000	\$ 27,150 \$ 5.000	\$ 25,000 \$ 25,000
PRESTO Program Support (Database development)		-/	+,
PRESTO workshop		\$ 17,850	\$ 10,000
Sub-total Expenses	\$ 110,000	\$ 71,016	\$ 110,000
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Total Expenses	\$ 149,375	\$ 79,024	\$ 150,145
Balance at Year End (positive balance carried over to next year)	\$ 292,125	\$ 321,906	\$ 249,980

5. Membership committee report

Koki Chau presented an update from the Membership Committee. Rwanda has sent an application to become a new member of SCOSTEP. Discussion was made for possible membership on Spain and Portugal which have intention to join. Some information updates were made for Argentina, Denmark, Sweden, Turkey, Azerbaijan, Italy, Nepal, and Mexico. It is noted that SCOSTEP membership flyer is available on the SCOSTEP website at https://scostep.org/membership/.

6. Presentation of STP-16 proposal to host STP-16 in 2026

Two countries were made online presentation on their proposal to host STP-16 in 2026. After the interview, Bureau made detailed discussion and decided to make additional question to one of the two candidates on the details on the amount of registration fee and the proposed venue.

7. Application for the new SCOSTEP membership (Rwanda)

Kazuo explained the application for the new SCOSTEP membership from Rwanda. University of Rwanda will act as the National Adherent institution. Scientists and students in Rwanda have been involved into various SCOSTEP activities such as participation in research conferences, schools, workshop and various trainings with particular focus on Space Weather research capacity building. After the discussion, Bureau decided to recommend Rwanda to the Council to accept application with the Univ of Rwanda acting as national representative.

8. SCOSTEP Fellow procedures

Kazuo proposed to discuss the procedures to award the SCOSTEP Fellow which was introduced from this year. Selection is by the SCOSTEP award selection committee. The Bureau agreed the following procedures, i.e., the winner will be awarded with a medal and award letter; the announcement will be on the SCOSTEP/PRESTO Newsletter (one person per page with citation); no announcement will be made for Distinguished Scientist and Service award winners, because they are announced separately; and SCOSTEP Fellow names are listed on the SCOSTEP website as the SCOSTEP fellow.

9. WMO-ISES-COSPAR Space Weather Forum

Kazuo introduced an invitation letter, which comes to the President, to the International Space Weather Coordination Forum in Geneva, Switzerland, on 17 November 2023. Mamoru explained details of this invitation, which was sent to 75 organizations related to the operational space weather. Discussion was made whether we should assign a person from SCOSTEP to act as a liaison to this committee (close to COSPAR or ISWI). PRESTO could be introduced as an activity. Nat suggests attending meeting before making a firm decision on how to support this committee going forward. Nat will attend on representing ISWI.

10. Draft agenda of General Council meeting

Kazuo introduced a draft agenda of the SCOSTEP General Council meeting which will be held on 14 July 2023. The notification of STP-16 venue was removed, since it was not decided yet. Other parts of the agenda was not changed.

11. Resolution of data exchange in IAGA and IUGG

Kazuo explained drafts of the resolution for "Sharing geomagnetic field data across borders" and "Sharing geophysical data across borders" which will be discussed in the executive committees of IAGA and IUGG, respectively. After the discussion the Bureau decided to support these two draft resolutions. Kazuo will transfer this SCOSTEP Bureau support to IAGA and IUGG executive after the Bureau meeting.

12. Selection status of new Scientific Discipline Representatives (SDRs)

Kazuo reported that according to the nomination and vote by the Bureau members after the last Bureau meeting, new 31 SDRs are assigned in addition to the current 10 SDRs. The new SDR list is available on the SCOSTEP website at https://scostep.org/about/sdrs/.

13. Scientific Secretary (SS) Office Updates

Keith made a brief report on Scientific Secretary office updates. They finalized the 2021/2022 Annual Reports, maintained all financial records, communicated with adherent member countries for annual payments, issued calls for Distinguished Service Award, the SVS program, Capacity Building, PRESTO events and database opportunities, managed the awards program, SDRs and Officers elections, K. Shiokawa and K. Groves are maintaining Secretariat functions, along with other members of the BC team providing IT, website, travel and administrative services (O'Conner, Murphy, Kraemer), Susan (Bonnie) Delay to support SVS travel arrangements and track incoming dues payments.

14. Reports from participating bodies

Brief reports from participating bodies are made from IAU, URSI, IAMAS, IAGA, COSPAR, IUPAP, and WDS. SCAR report was made previously in item 3.

- **14.1 IAU** (Kyung-Suk Cho): IAU 2024 General Assembly will be held on August 6-15 2024 in Cape Town, S. Africa.
- **14.2. URSI** (Koki Chau): URSI General Assembly (GA) will be held at Sapporo-Japan. Appleton Award will be to Prof Santolik in Czech Republic. Commission G activities are related to SCOSTEP. : 16th International Workshop on Technical and Scientific Aspects of iMST radars and lidars (iMST3-MST16) will be held in Germany on 6-13 September 2024.
- **14.3. IAMAS** (Peter Pilewskie): introduced 10 IAMAS commissions (www.IAMAS.org/Commissions.html), IRC Working Group: Total and Spectral Solar Irradiance, CMIP7 Solar Forcing Working Group, and new solar irradiance reference spectrum. There are numerous sessions related to SCOSTEP at IUGG 2023. Recent & upcoming meetings are PRESTO Workshop on May-Jun 2023, Sun-Climate Symposium on 16-20 October 2023 in USA, and IRC Symposium in Hangzhou, China on 17-21 June 2024.
- **14.4 IAGA** (Renata. Lukianova): IAGA request to be kept informed of SCOSTEP activities, looks forward to continued cooperation. At IUGG several sessions are related to the PRESTO program. IAGA resolution regarding sharing geomagnetic field data cross borders (e.g., loss of data from Intermagnet from Russian observatories).
- **14.5. COSPAR** (Yoshizumi Miyoshi): COSPAR has 46 member countries and 12000+ associates. COSPAR Scientific roadmaps will start in 2024 on Space Education. Commissions C and D and several panels are related to SCOSTEP. The 45th COSPAR Scientific Assembly will be held at Busan, South Korea on 13-21 July 2024. The 46th COSPAR Scientific Assembly will be held at Florence, Italy on 1-9 August 2026.
- **14.6. IUPAP** (Pravata Kumar Mohanty): IUPAP has organized Intl Year of Basic Science for Sustainable Development (IYBSSD) in 2022-2023. Opening ceremony was 8 July 2022 at UNESCO HQ in Paris and closing ceremony will be 15 December 2023. Science ethics and human development, sep 2022; world conf on basic science & development sep 2022; uN meeting 2023. 38 Int'l cosmic ray conference, ICRC2023 will be held in Nagoya, Japan, on 26 July 3 August 2023, largest conference in astroparticle physics, more than 1500 participants (hybrid). More than 100 contributions come from space weather, CME, SEP, Forbush decreases, geomagnetic storms, and magnetospheric effects.
- **14.7. WDS** (Mamoru Ishii): introduce WDS activities via website. WDS sustainability summit 2023 will be on 20-21 July at Univ of Tennessee as WDS IPO. NICT transferred IPO to Univ Tenn

in 2021. Speakers: Suzie Allard, PI of WDS IPO. Int'l Data Week on 23-26 Oct Salzburg. Meeting on Science Data Conference (SciDataCon 2023). First since 2019. Int'l Symposium on Data Science, 11-15 Dec, Science Council of Japan, Tokyo (hybrid format).

After these reports, terms of some liaison members are confirmed. Koki Chau (URSI) will be until 2026. Yoshizumi, Renata, and Peter will be until 2027. Kyung-Suk will rotate out this year after 8-years term (thank you, Kyung-Suk for your continuous support to SCOSTEP!)

15. Updates of ISC, UN STSC, UN COPUOS, and ISWI activities

Kazuo reported attendance of the International Science Council (ISC) Members' Forum in Paris, 10-12 May 2023. SCOSTEP is one of the Affiliated Bodies (a thematic organization) of ISC. After the meeting, Kazuo and Keith submitted a 17-page response to the ISC survey for Affiliated Bodies based on SCOSTEP Annual Report 2022. Then Kazuo reported the past presentations at United Nations (UN) Committee on the Peaceful Uses of Outer Space (COPUOS) and its Scientific and Technical Subcommittee (STSC). This year Nat and Madhulika Guhathakurta made presentations at UNCOPUOS STSC on February 9, 2023. Related to the activities of the International Space Weather Initiative (ISWI), School in Zambia will be held on 26-30 September 2023 with SCOSTEP support. AGS conference in the following week in Zambia (Oct.2-4). ICELLI in September 2023 in Nigeria, a school in Nepal will be held on September 2024. Andrew Akala is planning another school in Nigeria.

16. PRESTO updates

- Kazuo reviewed updates from the PRESTO program. It is only 1.5 year left until the end of the PRESTO program (2020-2024). After retirement of Eugene Rozanov from a PRESTO co-chair, Odele Coddington (former Pillar 3 co-leader) was prompted to the co-chair position. Additional co-leader of Pillar 3 has not been fixed yet.
- ICTP-SCOSTEP-ISWI Workshop on the Predictability of the Solar-Terrestrial Coupling PRESTO (PRESTO workshop and school, https://indico.ictp.it/event/10176) was held on Mah 30-June 2, 2023, at ICTP in Trieste, Italy, as the first face-to-face meeting of the whole PRESTO program. Eighty-three on-site participants were joined from 39 countries.
- In addition to this overall meeting, Pillar 1 has several sessions in IUGG2023, Pillar 2 has sessions in COSPAR 2022, 2024 and a ISSI team is on going, and Pillar 3 is summarizing a review paper on solar emission and climate and sessions on COPAR2022 and IUGG. CMIP7 solar forcing working group is on-going. PRESTO ends at the end of 2024. PRESTO officers consider having a final PRESTO meeting in fall 2024 and make special issue of publications related to the PRESTO outputs.
- The SCOSTEP/PRESTO online seminar is on-going. Latest one (16th) was by Annika Seppala on April 19, 2023 (https://scostep.org/online-seminar-series/).
- SCOSTEP/PRESTO newsletter is distributed every three months with articles, highlight of young scientists, meeting reports, and short news (https://scostep.org/resources/scostep-presto-newsletter-archive/).
- SCOSTEP/PRESTO funding opportunities are continued, and 7 meetings and 2 database constructions are supported in 2023 (https://scostep.org/grant-proposals/).

17. School activities supported by SCOSTEP

Kazuo reported the school activities supported by SCOSTEP. According to the SCOSTEP Capacity Building supports, SCOSTEP can support school activities with funding maximum \$5000 per event. In 2022, four schools were supported, i.e.,

- Iberian Space Weather School on June 6-10, 2022, at University of Alcala, Spain
- The 2nd summer school on Space research, technology and application on 3-10 July 2022 at National Astronomical Observatory (NAO) Rozhen, Bulgaria
- 5th edition of the ISWI Maghreb Afrique de l'Ouest (IMAO) school at Houphouët Boigny University, Abidjan, Côte d'Ivoire on 17-28 October 2022
- The International Workshop on Machine Learning for Space Weather: Fundamentals, Tools and Future Prospects on 7-11 November 2022 in Argentina.

In 2023. four schools are being supported:

- 2nd Iberian Space Science Summer School at University of Alcala, Spain, on June 26-30, 2023
- The 2023 IMCP Space Weather School at National Space Science Center, Chinese Academy of Sciences, Beijing, China on September 14-23, 2023
- The International Space Weather Initiative School at Grand Palace Hotel in the city of Lusaka, Zambia on 26-20 September 2023
- COSPAR Capacity Building Workshop: Solar-Terrestrial Coupling Processes and Space Weather at University of Lagos, Nigeria, on 9–20 October 2023.

18. SCOSTEP online capacity building lectures

SCOSTEP continues the online capacity building lectures with a strong support by Dr. Claudia Martinez-Calderon of Nagoya University, Japan, as the lecture coordinator. The latest lecture was by Prof. Yoshizumi Miyoshi on 30 June 2023. Ishita Gulati in UK Met Office will join to the lecture coordinator from the next lecture. The recorded video of the lectures is available from the SCOSTEP website at https://scostep.org/.

19. SCOSTEP 2023 Distinguished Service Award

Kazuo explained that the SCOSTEP 2023 Distinguished Service Award will be given to Dr. Marianna Shepherd of York University, Canada, at the SCOSTEP General Council meeting on July 14, 2023 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.

20. SCOSTEP Visiting Scholar (SVS) updates

Kazuo reported the updates of the SVS program. In 2022, 20 students were approved for the SVS program scholarship. In 2023, 15 students were approved for the program. The actual trip in 2023 has just started for some students. Their visit will mostly happen during the second half of this year.

21. SCOSTEP comic book updates

Kazuo introduced that a new comic book (10th topic) on Space Weather has been made using the PBASE project budget in the Institute for Space-Earth Environmental Research (ISEE), Nagoya University, Japan. ISEE will provide a bubble version of this comic-book digital file to SCOSTEP

for translation to other languages. The printed version of the comic books was distributed in the UN COPUOS STSC meeting in February 2023.

22. Other topic

Kazuo noted that the next Bureau will be sometime in the November or December of 2023. Finally, Kazuo thanked all the bureau members for attending this meeting and for their continued support of SCOSTEP.