1. Approval of the Agenda
2. Approval of the minutes of the June 17 2015 meeting
3. Community items
   a) CAP-NSERC liason (Hocking)
4. Matters arising from the minutes R. Marchand
5. Membership and financial status: R. Marchand
6. Best student presentation competition: R. Marchand
7. Information item:
   The space library "The Space Library". http://www.thespacelibrary.com
   Other items
8. Reports by agencies.
   CSA
   NSERC
   CFI
9. Reports by national representatives
   a) GEM
   b) CEDAR
   c) COSPAR
   d) SCOSTEP
   e) URSI
   f) IAGA
   g) CSA
   h) CNILC (IUPAP)
10. Financial status and division fees (Marchand)
11. Election of a Secretaty
12. Venue of the 2016 DASP workshop
13. Passing of the buck to Johnathan Burchill as new DASP Chair
14. Adjournment
Minutes

1. Approval of the Agenda
   Moved: Johnathan Burchill
   Alex Cushley

2. Approval of the minutes of the June 17 2015 meeting
   Martin Connors
   Alex Cushley

3. Community items
   a) CAP-NSERC liaison (W. Hocking)
      See Appendix A

4. Matters arising from the minutes R. Marchand
   A letter (see Appendix D) was sent to the CSA president Sylvain Laporte to ask that a
   consultative body be reestablished to represent the DASP community. A reply has been received
   (Appendix E) and arrangements must now be made by the DASP Chair to contact CSA Director
   General for Space Utilization Éric Laliberté to discuss the modalities for establishing such a
   formal consultative body.

5. Membership and financial status: R. Marchand
   DASP now has a total of 171 members. See details in point 10.

6. Best student presentation competition: R. Marchand
   Judges: Martin Connors, James Drummond, Wayne Hocking, David Knudsen, Patrick Perron
   (Head Judge)
   Nine students are competing for the best oral presentation.
   No one registered in the poster competition.
   Two prizes can be awarded by DASP.
   One student can be selected for the final CAP competition.

7. Information item:
   The space library "The Space Library". http://www.thespacelibrary.com
   Gordon Shepherd presented this initiative which is aimed at archiving documents and videos
   from space science research. Some services are free of charge, but subscription fees must be
   paid in order to have full access to the Library.

DASP is the Canadian Association of Physicists’ Division of Atmospheric and Space Physics
8. Reports by agencies.
CSA: A report was presented by John Manuel during the last thirty minutes of the afternoon session.

9. Reports by national representatives
a) SCOSTEP (W. Ward)
   See Appendix B
b) IAGA (A. Yau)
   See Appendix C
c) CNILC – IUPAP (R. Marchand)
   1. CNILC is the Canadian national committee which acts as the liaison with the International Union of Pure and Applied Physics (IUPAP).
   2. R. Marchand represents Group 1 (General and Near Earth Physics) covers the following IUPAP commissions:
      1. C2 Atomic Mass and Fundamental Constants
      2. C15 Atomic Physics
      3. C16 Plasma Physics
      4. C17 Laser Physics and Photonics
   3. Each commission periodically attributes awards and prizes.
      The main prize being the “Young Scientist Prize”.
      The one most relevant to DASP could be from C16 or C17. Announcements for these prizes will likely be made in November 2016 with a deadline in January 2017.
   4. It was also mentioned that IUPAP can provide funds to help host international conferences in Canada. Details can be found at http://iupap.org/sponsored-conferences/

10. Financial status and division fees (Marchand)
   a) Full members: 32 (1 with 2nd year of 5-year membership)
      Full members foreign: 2
      Full members reduced: 3
      Full members retired: 5 (1 with 2nd year of 5-year membership)
      Graduate students: 34
      CASCA + CIC joint members: 5
      Undergraduates: 90
      Total: 171
   b) Last year's revenue and expenditures:
      Revenue: $ 460
      Expenditures: $1241
      Current balance: $3446.21
      It was noted that revenues generated from investments made by CAP with division funds were not given back to divisions.

11. Election of a Secretary
   This will be done later by e-mail.
   If anyone wishes to volunteer or nominate someone, please send your suggestions to the new Chair Johnathan Burchill.

12. Venue of the 2016 DASP workshop
   This will be decided in the coming months.
13. Passing of the buck to Johnathan Burchill as new DASP Chair
   The chairmanship was passed to Johnathan who asked for a motion to adjourn the meeting.

14. Adjournment
   The meeting was adjourned shortly before 13:00.
Appendix A

Liaison committee highlights
1. Need for more reviewers - Canadians should respond to requests to be a reviewer
2. External reviewers - NSERC finds their use variable - _may_ discuss reducing them???
3. Cost Research Factor changed.. Low, normal, high --> normal, high ... low --> normal, not zero
4. Split across Evaluation groups of (a)Physics (1505) and geosciences (1506)
   --- buffer the effect by loading up the expert panels?
   DG Panel of Experts Nominations.. NEED MORE.

=================================================================================================

Kathryn McWilliams kathryn.mcwilliams@usask.ca
Andrew Yau already there
Daniel Vollick, dan.vollick@ubc.ca.
(RESEARCH: general relativity; black holes; cosmology; string theory - not quite what I was after?)

Chairman of the Board Sigma Energy Storage
Montreal, Canada Area
Oil & Energy

Glenn Hussey http://artsandscience.usask.ca/profile/GHussey#/research

=================================================================================================

5. CASCA (Astronomy etc) not repesented on liaison committee, and similarly have no "home"
   (GSC17 was decimated).
5. Reviewing Create - HQP? Other issues. (NSERC internal review)
6. open access - no need to pay fee but must at least have in a repository e.g. your library.
7. Open access **data** now a big issue
8. Sciencreview.ca
   - make own submissions
9. 2020 vision plan (also individuals could put things in)
10. Research Partnerships forum here at CAP
11. Reviewing CGSM... Canada Graduate Scholarships-Master's Program (NSERC internal)

- 2014 to 2018 Program is VarSITI (Variability of the Sun and its Terrestrial Impact).
- SCOSTEP awards
- Seed funding for workshops etc. is available.
- Visiting Scholar Program.
- Newsletters: Opportunities for new career scientists and program promotion.
- 2017 – 2nd VarSITI Symposium (Irkutsk, Russia, June 26-30, details forthcoming)
- 14th Quadrennial Solar-Terrestrial Physics Symposium (STP14) in 2018 (proposed for Canada).
SCOSTEP Medals

• **SCOSTEP Science Award**
  – The award is given to recognize an outstanding contribution of a scientist to solar-terrestrial physics;

• **Young Scientist Award**
  – The award is given to young scientists who achieved considerable success in solar-terrestrial physics and took an active part in SCOSTEP-related activities;

• **SCOSTEP Service Award**
  – The award is given to recognize a unique contribution to SCOSTEP-related activities, to realization of its programs and events. The awards will be given biannually.

Prof. Dr. Sami Solanki (Max Planck Institute for Solar System Research, Germany) was this year’s winner of the Science Award. **Dr. Nick Petadella** (HAO, UCAR, USA) and **Dr. Brett Carter** (Space Research Centre, RMIT University, Australia)

Information on the nomination procedure http://www.yorku.ca/scostep/
SCOSTEP Visiting Scholar Program

- **Objective:** to provide training for young scientists and graduate students from developing countries in well-established solar terrestrial physics laboratories and institutions.
- **Duration:** between one and three months.
- Four scholars each year, one related to each of the four SCOSTEP VarSITI themes (http://www.varsiti.org/).
- Several labs have been identified as host locations.
- If you wish to have your institute considered as a host site, please contact Marianna Shepherd, msheper@yorku.ca
Variability of the Sun and Its Terrestrial Impact (VarSITI)

• VarSITI is the current international interdisciplinary research program of the Scientific Council on Solar Terrestrial Physics.

• It focuses on four major themes:
  – Solar magnetism and extreme events,
  – Earth impacting solar transients,
  – Magnetospheric changes,
  – Consequences and processes in the Earth's atmosphere.
Variability of the Sun and Its Terrestrial Impact (VarSITI)

• Four projects were initiated under this program:
  – Solar Evolution and Extrema (SEE)
  – International Study of Earth-Affecting Solar Transients (ISEST)
  – Specification and Prediction of the Coupled Inner-Magnetospheric Environment (SPeCIMEN).
  – Role Of the Sun and the Middle atmosphere /thermosphere /ionosphere In Climate (ROSMIC)

• VarSITI Co-Chairs (Contact to get involved):
  – Prof. Katya Georgieva, Bulgaria (katyageorgieva@msn.com )
  – Prof. Kazuo Shiokawa, Japan (shiokawa@stelab.nagoya-u.ac.jp )

• Observing campaigns; data archiving; collaborations; national funding opportunities (alignment with VarSITI scientific goals); possibility to help guide future scientific activities.
VarSITI/SCOSTEP Seed Grants

• Grants of the order of a few thousand dollars.

• Information on grants - http://www.varsiti.org/ under the organization tab.

• The deadline for applications for 2017 will be in December 2016.
VarSITI Newsletter

To post in the newsletter go to http://www.varsiti.org/ and under the publications tab there is information on how to proceed.

Submit feature articles on your activities.

Special articles on young scientists.

The contact person is Ms. Miwa Fukuichi (fukuichi@isee.nagoya-u.ac.jp).
14th Quadrennial Solar-Terrestrial Physics Symposium (STP14) - 2018

• STP 14 will take place in Vancouver July 9-13, 2018, the week before COSPAR.
• Convenient dates to minimize costs for international visitors.
• The scientific program will advance our understanding of the solar-terrestrial relationship using space- and ground-based observations, cutting-edge models and theory.
• Opportunity to promote the activities of our community.
Web Sites

http://www.varsiti.org/
http://www.yorku.ca/scostep/

VarSITI Co-Chairs (Contact to get involved):

– Prof. Katya Georgieva, Bulgaria
  (katyageorgieva@msn.com)

– Prof. Kazuo Shiokawa, Japan
  (shiokawa@stelab.nagoya-u.ac.jp)
Appendix C

Report by National Representative – IAGA
DASP Business Meeting, Ottawa, June 14, 2016

Andrew Yau
June 14, 2016

IAGA-related activities in the past year of interest to the DASP community are summarized as follows:


•

IUGG 2015 was held in Prague, Czech Republic in June 2015. The CNC-IUGG 2015 Report notes that: “Canada's contribution to IAGA content at the IUGG Prague was significant. There were sixteen IAGA-affiliated Canadian attendees... These 16...attendees presented 21 papers at the meeting... four of the Canadian IAGA attendees were Conveners or co-convener, and two attendees acted as Chairs for two other sessions.”


•

The next IAGA Scientific Assembly will be held at Cape Town, South Africa on Aug 27-Sep 1, 2017, jointly with IAMAS and IAPSO. Call for Abstracts will be forthcoming and DASP community members are encouraged to attend this Assembly and to submit contributions to relevant Symposia.

[3] Canadian IAGA National Representative

•

Traditionally, the Canadian National Committee of IUGG (CNC-IUGG) appoints two persons nominated by the CAP and the CGU (Canadian Geophysical Union, respectively), to represent Canada as IAGA Representatives.

For 2011-2015: Andrew Yau was the Senior Representative, and Phil McCausland was the Junior Representative

For 2015-2019: Phil McCausland is the Senior Representative; the Junior Representative is being nominated by CAP

[4] Canadian representation in IUGG and IAGA

•

One of the metrics used by the Government to evaluate Canadian contributions to (and leadership in) the international scientific community in the different discipline areas is the participation rate of Canadians in leadership positions of international scientific bodies and associations.

In the area of the CNC-IUGG, which includes IAGA, Michael Sideris was elected President of IUGG for 2015-2019.

Andrew Yau was reelected Executive Committee member of IAGA for 2015-2019.
February 22, 2016

Mr. Sylvain Laporte
President
Canadian Space Agency
John H. Chapman Space Centre
6767 Route de l'Aéroport
Saint-Hubert, Québec
J3Y 8Y9

Re: DASP Consultative and Advisory Committee to the CSA

Dear Mr. Laporte,

As mentioned in my letter of January 5, I am writing to request that the Division of Atmospheric and Space Physics (DASP) of the Canadian Association of Physics (CAP) be given an opportunity to provide input, and assume an advisory role to the Canadian Space Agency (CSA) on matters of importance in atmospheric and space research in Canada. An ad hoc committee composed of representatives from several Canadian research institutions engaged in atmospheric and space science, has agreed to submit the following statements giving our vision, objectives and suggested *modus operandi*:

1. Vision
   Atmospheric and Space Science is of strategic importance in Canada’s economy, safety, well being and future participation in international affairs with other developed countries. The Division of Atmospheric and Space Physics (DASP) is composed of Canadian professionals, scientists and academics, working in the many areas of atmospheric and space science in Canada. We see DASP as an essential partner with the Canadian Space Agency (CSA) in establishing priorities and roadmaps in the development of science and technologies upstream of anticipated future needs in space observation, exploration, and exploitation.

2. Objectives
   We propose to re-establish a formal advisory body to the CSA, as outlined in the attached 2007 “CSA Science Advisory Committees” document, which would have a voice in reviewing and updating priorities in atmospheric and space physics research and technology developments in Canada.

3. Proposed *modus operandi*
   Our committee would interact with the CSA as outlined in the enclosed 2007 document or, if adjustments are needed, as other consultative committees now listed on the CSA web page.

If you agree to this proposal we believe that it would be useful to engage in a discussion directly with you or with a delegate on how to proceed in more detail.

I look forward to reading your reply.

Yours sincerely,

[Signature]

Richard Marchand
DASP Chair
tel: 780 492 1061
did: 780 492 0714
e-mail: Richard.Marchand@ualberta.ca

Enc. Copy of the 2007 “CSA Science Advisory Committees”
CSA Science Advisory Committees

CANADIAN SPACE AGENCY
SPACE SCIENCE BRANCH
SCIENCE ADVISORY COMMITTEES

TERMS OF REFERENCE and PROCEDURES

MANDATE

1. TO ADVISE THE CANADIAN SPACE AGENCY (CSA) ON ITS SCIENTIFIC PROGRAMS. This includes advice on discipline priorities, areas of research focus, timing of solicitations to the respective scientific communities, mechanisms for project review and selection, division of available funding, and opportunities relating to national and international programs and vehicles and/or platforms suitable to conduct research activities.

2. TO ASSIST THE CSA IN THE DEVELOPMENT OF THE CANADIAN COMMUNITY IN THE SPECIFIC SCIENCE FIELD. This includes advising the CSA on pertinent emerging science research trends, assisting the CSA to inform the relevant community of programs, events and opportunities in the science discipline area, assisting in developing strategies relating to the recruitment and training of young scientists, and promoting and providing feedback on the CSA Grants and Contributions program.

3. TO PROVIDE FEEDBACK TO THE CSA. This includes advising the CSA on the science community reaction to its initiatives and programs, evaluating the efficacy of the program and suggesting improvements to the science program.

4. TO ASSIST IN THE PROMOTION OF PUBLIC AWARENESS OF THE NATURE AND BENEFITS OF SPACE SCIENCE RESEARCH.

COMMITTEES

There are five science advisory committees currently supporting the CSA Space Science Branch. These are:

- Space and Atmospheric Environments Advisory Committee (SAEAC) [N.B. this committee includes two sub-committees, one for each of the discipline areas – atmospheric sciences and solar-terrestrial sciences.]
- Joint Committee on Space Astronomy (JCSA) [N.B. this committee is joint with the Canadian Astronomical Society (CASCA).]
- Space Exploration Advisory Committee (SEAC)
- Life Sciences Advisory Committee (LSAC)
- Physical Sciences Advisory Committee (PSAC)

SCOPE

The purpose of the CSA Science Advisory Committees is to provide independent advice to the Canadian Space Agency on scientific matters within the realm of the various specific science discipline areas and their specific programs. In particular, the committees provide advice on areas of focus of the specific program, solicitations to the respective scientific communities, mission and program priorities, and funding commitments. As representatives of the Canadian scientific communities, the committees express the response of the communities at large to programs and initiatives of the CSA as well as advice on the latest trends in science that could be relevant to the specific program areas. The committees also provide feedback on how well the specific program is fulfilling its mandate and offer suggestions and advice to improve the program. To this end, each committee will provide a brief written annual
CSA Science Advisory Committees

report to the Director General, Space Science Branch at the end of each calendar year highlighting these evaluation aspects of the program in the specific discipline area.

It should be noted that some Science Advisory Committees might agree to take on additional responsibilities for reporting to other bodies on Canadian activities within a specific space science field or area.

ELIGIBILITY, APPOINTMENT AND TENURE

Each committee provides advice and recommendations through the Chair directly to the CSA Director responsible for the discipline area and its program. The CSA Program Scientist in the science discipline area of each advisory committee is offered by the CSA to be the point of contact for routine communications between the committee and the CSA and will normally act as the Executive Secretary for the committee, although other arrangements could be made on the recommendation of the committee. The Committee will normally be comprised of six voluntary members from the community, including a Chair, and excluding a non-voting Executive Secretary. Only full members may vote. On advice from the Chair, a representative from the appropriate federal science research funding council(s)/institute(s) (NSERC/CIHR/SSHRC) will be invited to attend meetings as a permanent invitee to the committee.

Members of the committee will be selected on the basis of their expertise, experience, and interest in relation to the mandate of each committee. Subject to the foregoing, the membership should reflect as wide a distribution across Canada and represent as many of the sub-disciplines within the specific discipline area as is feasible. Members will serve for a three-year term, nominally starting on 1 January, although individual committees may adjust this date depending on circumstances. Membership can be renewed, however, renewal for more than two consecutive terms will be actively discouraged. An appropriate number of members will be selected, renewed or rotated annually to maintain the appropriate composition of the committee while minimizing loss of experience and continuity. Each committee recommends new members after broad consultation with the respective community. The CSA Director responsible for the program formally appoints the recommended new members.

The committee appoints a new Chair from amongst the members during the final meeting of the outgoing Chair. If no decision can be reached through this process, the responsible CSA Director will poll the members in order to suggest a suitable candidate for approval by the committee. The Chair also represents the interests of the scientific community on the CSA Senior Science Advisory Committee as a full member of this latter committee.

The Chair of the committee may request the responsible CSA Director to terminate the membership of a committee member and/or appoint a new member out of rotation for reasons of resignation, failure to attend meetings or actively participate in the committee, or other justifiable reasons.

EX OFFICIO MEMBERS AND OBSERVERS

The Chair of the committee may request the responsible CSA Director to appoint ex officio members of the committee, either voting or non-voting. Senior representatives of major stakeholder programs (e.g., senior representatives of other federal government departments that support the scientific activities of the discipline area of the committee) could be examples of ex officio members. Furthermore, members of the community who bring specific strengths to the committee; e.g., specific expertise not otherwise available to the committee, chairs of Discipline Working Groups/Topical Teams, etc.; may be invited to become either non-voting or full-voting ex officio members of the committee by the responsible CSA Director on recommendation of the Chair. The responsible CSA Director reserves the right to limit the number of ex officio members by reasons of budget.

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1 As an example, SAEAC will provide regular reports in relation to Canada's adherence to SCOSTEP, the Scientific Committee on Solar-Terrestrial Physics.
2 SAEAC has two Program Scientists supporting the committee.
3 It is recommended that the number of full members for each committee be six, however, some committees, by virtue of the breadth of science interests or composition (e.g., SEAC, SAEAC), may have a larger number of members.
4 The members and Chair of the ICSA are appointed in consultation with the Canadian Astronomical Society.
5 Note that this does not exclude scientists from other government departments being full voting members of the committee.
CSA Science Advisory Committees

There are two primary purposes for including observers at meetings; namely, to facilitate information exchange with an office or body having collateral interests, and/or to make particular expertise or experience available to the committee. A formal invitation to participate as an observer will be extended by the Executive Secretary of the committee after consultation with the Chair. Observers may participate in committee discussions, but may not vote. They will receive copies of minutes of meetings and other communications, as appropriate. All CSA employees will be considered observers (except the Executive Secretary if provided by the CSA).

MEETINGS

The Chair, working with the Executive Secretary, will convene and set the agenda of all meetings. At least one full face-to-face meeting will be held each year. Video/teleconference meetings between scheduled face-to-face meetings will be encouraged. Meetings of the committee can be open, closed (full members, or, full and *ex officio* members only) or, partially open and partially closed, depending on the decision of the Chair. The Chair may call for a closed portion of a meeting at any time. It is expected that a portion of every meeting during which final recommendations are developed will be closed.

Every effort will be made to engage the applicable scientific community in the workings and deliberations of the committee. To this end, agendas of regular meetings of the committee will be posted on the CSA web site at least one month prior to a meeting, inviting members of the community to suggest items to be added to the agenda. Members of the applicable scientific community will be informed of meetings through the CSA web site and any other means as deemed appropriate, and may attend the open portion of committee meetings as non-invited observers (at their own expense). For logistical and security (when meetings are held at the CSA HQ) reasons, CSA must be notified in advance of the attendance by non-invited observers.

Concise minutes of meetings will be prepared by the Executive Secretary and will be circulated appropriately after approval by the Chair. Minutes will be made available no later than one month after each meeting.

FUNDING

The activities of each Science Advisory Committee will be funded by the CSA through an annual budget that will be agreed upon between the committee and the responsible CSA Director prior to each fiscal year (1 April). Every effort will be made to ensure that the budget is sufficient for regular activities of the committee, including all travel and living expenses for the members, full and *ex officio*, and invited observers who need support to attend meetings, the rental of meeting rooms, limited refreshments during meetings, etc. The responsible CSA Director retains the right to limit the budget to that which has historically been required to support the activities of the Committee.

COMMUNICATIONS

A CSA extranet web site with password protection will be set up for each committee and managed by the Executive Secretary. All full members of the committee will have access to the site. All reports and documents to be discussed by the committee will be deposit on the extranet site. Minutes of meetings will be circulated to the responsible CSA Director, the Director General of the Space Science Branch, and all committee members (full and *ex officio*) and designated observers, and added to the CSA extranet site dedicated to the committee. Committee reports (other than the annual report), recommendations, etc. will be directed to the responsible CSA Director and committee members. A brief summary of each meeting, including actions and recommendations resulting from the meeting, will be posted on the CSA web site for information purposes within two months of the conclusion of the meeting.

No one, other than the Chair, will represent or speak on behalf of the committee unless requested to do so by the Chair.

RECORDS

In addition to minutes of meetings, the Executive Secretary will generate and maintain permanent records documenting the activities of the committee, including records of the membership, which will be added to the extranet site.
MAR 3 0 2016

Dr. Richard Marchand  
Chair of the Division of Atmospheric and Space Physics (DASP)  
Department of Physics, CSIS 4-181  
University of Alberta  
Edmonton (Alberta) T6G 2E1

Subject: Division of Atmospheric and Space Physics Consultative and Advisory Committee to the Canadian Space Agency

Dear Dr. Marchand,

Thank you for your correspondence of February 22, 2016, communicating the interest of the Division of Atmospheric and Space Physics (DASP) to provide input and to advise the Canadian Space Agency (CSA) on matters of importance related to atmospheric and space research in Canada.

As you may be aware, the Government of Canada has emphasized the need to act based on the best scientific evidence and advice. As such, your letter comes at an opportune time, as the CSA is currently reviewing its governance structures related to our interactions with the Canadian space science community. I would appreciate meeting with you to discuss how best to capitalize on the DASP expertise with a view to benchmark a process that underpins mutually beneficial priorities.

I have appointed Mr. Eric Laliberté, Director General of Space Utilization to oversee this process. I invite you to contact Mr. Laliberté at your earliest convenience to arrange a preliminary meeting. Mr. Laliberté can be reached at 1-450-926-4461 or at eric.laliberte@canada.ca.

Sincerely,

[Signature]

Sylvain Laporte

cc. Éric Laliberté