Committee on Solar and Space Physics Fall Meeting

December 1-2, 2025

Hybrid Meeting

National Academy of Sciences Building, Board Room, 2101 Constitution Ave. NW, Washington, DC

ALL TIMES IN US EASTERN DAYLIGHT TIME

MONDAY, DECEMBER 1, 2025

CLOSED SESSION

8:30 AM — Closed, committee-only discussion

10:45 AM — Meeting Adjourns to Open Session; Break (15 minutes)

OPEN SESSION

Livestream link: https://vimeo.com/event/5547080

11:00 AM — **National Science Foundation Geospace Update**
(25-minute presentation and 20-minute discussion)
Dr. Mangala Sharma
Geospace Cluster Coordinator, NSF

12:00 PM — Working Lunch for Members, Speakers, and Invited Guests

1:00 PM — **NOAA Space Weather Predication Center Update**
Mr. Clinton Wallace, SWPC Director
Dr. Howard Singer, SWPC Chief Scientist
Dr. Tzu-Wei Fang, Space Scientist

2:00 PM — **Atmospheric Waves Experiment (AWE) Mission Update**
(40-minute presentation and 20-minute discussion)
Dr. Ludger Scherliess
Principal Investigator, Utah State University

3:00 PM — Break (15 minutes)

3:15 PM — **Polarimeter to Unify the Corona and Heliosphere (PUNCH) Mission Update**
(40-minute presentation and 20-minute discussion)
Dr. Craig DeForest
Principal Investigator, SwRI

4:15 PM — Break to move to closed session (15 minutes)

CLOSED SESSION

4:30 PM — Closed, committee-only discussion

6:00 PM — Committee Working Dinner

TUESDAY, DECEMBER 2, 2025

CLOSED SESSION

8:30 AM Closed, committee-only discussion

9:20 AM *Break to move to open session (10 minutes)*

OPEN SESSION

Livestream link: https://vimeo.com/event/5547087

9:30 AM **Update from NOAA National Environmental Satellite, Data, and Information Service**

Dr. James Spann, Jr.
Senior Scientist for Space Weather, NOAA NESDIS

10:15 AM *Break (15 minutes)*

10:30 AM **Discussion of Impact of Budget Uncertainties on Decadal Priorities**

Panel Description: In the context of funding circumstances that are substantially below those assumed in the recent decadal survey, what are the impacts to progress on the decadal priorities? What are the challenges and opportunities for achieving progress given programmatic changes? What actions could be taken to maximize progress on key priorities?

(15 minute individual statements & 60-minute discussion period)

Panelists:

Dr. Robyn Millan, Co-Chair, 2024 Decadal Survey, Dartmouth College

Dr. Mark Moldwin, Chair, Heliophysics Senior Review, and Co-Chair, 2024 Panel on State of the Profession, University of Michigan

12:00 PM *Working Lunch for Members, Speakers, and Invited Guests*

1:00 PM **Laboratory Heliophysics: Highlights and Future Directions** **Dr. Hantao Ji**
Princeton Plasma Physics Laboratory

2:00 PM **Overview of the Solar Polarization and Directivity X-Ray Experiment (PADRE) CubeSat**
(30-minute presentation and 15-minute discussion) **Dr. Juan Oliveros**
Principal Investigator, Univ. of California, Berkeley

2:45 PM *Break (15 minutes)*

3:00 PM **Overview of the National Solar Observatory and Update on the Daniel K. Inouye Solar Telescope (DKIST)**
(45-minute presentation and 15-minute discussion)
Dr. Christoph Keller, Director
National Solar Observatory

4:00 PM *Break (15 minutes)*

4:15 PM **Closing Comments by the Committee**

5:00 PM *Adjourn to Closed Session*

CLOSED SESSION

5:15 PM	Closed, committee-only discussion
6:00 PM	*Meeting Adjourns*

IMPORTANT NOTES

Presenters:

- Please do not include unpublished data, ITAR-controlled or sensitive information in your presentation.
- A National Academies Board staff member will ask you to sign a form before the meeting allowing us permission to use your likeness and presentation for our livestream video, which will be posted on our Board website after the meeting. Please get in touch with us before the meeting if you have any concerns about this usage.

Members and Presenters:

- Remote access will be provided through Zoom. This will allow you to participate in the meeting even if you can't be physically present.
- Please note that Zoom allows audio and any materials exchanged or viewed during the session to be recorded and shared.
- By participating in this activity, you agree to let your voice, likeness, and any materials you provide be recorded for use and dissemination. This includes any language, format, or media now known or later devised.
- You release the National Academies of Sciences, Engineering, and Medicine from any and all claims, liability, or damages arising from any such use. If you disagree, please do not join the session.

Members of the General Public:

- Remote access will be provided through a live stream on Vimeo. This will also be publicly available and posted on the Board website. You do not need to register.

Thank you all for your cooperation, and we look forward to a successful meeting.

Statement of Task

The National Academies of Sciences, Engineering, and Medicine (NASEM) will appoint the Committee on Solar and Space Physics (CSSP) to support scientific progress in solar and space physics (Heliophysics) and to assist the federal government in planning programs in these fields by providing advice on the implementation of decadal survey recommendations. The CSSP provides an independent, authoritative forum for identifying and discussing issues in solar and space physics between the research community, the federal government, and the interested public.

The CSSP's scope spans space-based and supporting ground-based research in support of scientific programs in solar physics, heliospheric physics, plasma physics, magnetospheric physics, aeronomy, physics of the upper atmospheres of Earth and other planets, solar-planetary interactions, and cosmic ray physics. The CSSP's scope also includes appropriate cross-disciplinary areas and consideration of budget and programmatic aspects of the implementation of the decadal survey.

The committee shall monitor the progress of implementing the priorities in the most recent decadal survey for the most important scientific and technical activities in that report and recommendations in the subsequent mid-decadal review report.

When requested by a sponsor and as approved by NASEM in accordance with its procedures, the committee may write reports to assess progress on the implementation of the decadal survey's recommended scientific and technical activities. The reports shall be based on evidence gathered by the committee. The reports may address key strategies being pursued by the agencies and the status of agency actions that relate to the state of implementation. The reports may also highlight scientific discoveries and engineering and technical advances relevant to progress on the science objectives identified in the most recent decadal survey and in addition may focus on one or more of the following types of issues:

- The scientific impact of a change in the technical and engineering design, cost estimate, schedule, or programmatic sequencing of one or more of the survey-recommended activities;
- The impact of a scientific advance on the technical and engineering design, schedule, or programmatic sequencing of one or more survey-recommended activities;
- The scientific impact of a course of action at a decision point described in the survey report and recommended therein as being suitable for consultation with an independent decadal survey implementation committee;
- The scientific impact of implementing recommendations from the mid-decadal review and other relevant NASEM reports.