The National Academies of SCIENCES • ENGINEERING • MEDICINE

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES
SPACE STUDIES BOARD

Space Weather Roundtable Spring Meeting

June 1-2, 2023

Keck Center, Room 206

Hybrid meeting

ALL TIMES IN US EASTERN DAYLIGHT TIME

This agenda is a draft, subject to change, and was last updated on 5/31/2023 12:15 PM

AGENDA

THURSDAY, JUNE 1, 2023

OPEN SESSION *LIVE-STREAMED FOR PUBLIC ACCESS*

Livestream Link: https://vimeo.com/event/3458312

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8:00 AM Breakfast is available in the room

9:00 AM Welcome and Introductions Geoff Crowley, Committee Co-Chair

Sarah Gibson, Committee Co-Chair

9:15 AM Space Weather Updates

(45-minute listening session)

• SWAG Seth Jones, LMCO

SWORM Jinni Meehan, NOAA

NASA SWx Council
 Nicole Duncan, Ball Aerospace

Benchmarking Efforts: STPI Phase 2 Geoff Reeves, LANL

Benchmarking Industry
 Mark Olson, NERC
 Bill Murtagh, NOAA SWPC (TBC)

10:00 AM Roundtable Discussion

(45-minute discussion session)

What role can RT play in moving efforts forward?

^{*} Placeholder Title – To Be Updated by Speaker

10:45 AM Break

(15-minutes)

11:00 AM R2O-O2R NASA R2O2R Program Grants Element

(40-minute listening session)

Overview and Status of Program
 Genene Fisher, NASA HPD

Science PI point of view
 Shea Hess Webber, Stanford Univ.
 Humberto Godinez, LANL

Commercial Point of View
 Janet Green, Space Hazards

11:40 AM Roundtable Discussion

(50-minute discussion session)

12:30 PM Working Lunch

(60 minutes)

1:30 PM Introduction to Afternoon Sessions Geoff Crowley, Committee Co-Chair

Sarah Gibson, Committee Co-Chair

1:40 PM Transition to Operations, OSSEs, Data Buys and Terrestrial Weather Analogs

Lessons learned from lower atmospheric data assimilation
 Nikki Prive, Morgan State Univ./NASA GSFC

NOAA Strategies for Data Buys

Elsayed Talaat, NOAA NESDIS

2:10 PM Roundtable Discussion

(60-minute discussion session)

- Do we have the right models/infrastructure/observational technologies, for use in the operational world (testbeds)?
- What lessons are learned from tropospheric OSSE weather efforts in identifying, and then deploying/implementing additional datasets for augmenting models (methods used, agency response, degree of success)?
- What are the risks associated with data buys?

3:10 PM Break

(10-minutes)

3:20 PM GDC Panel

Relevance of GDC for Space Weather Katherine Garcia-Sage, NASA GSFC

How future plans relate to space weather (NASA, NOAA, NSF)

Elsayed Talaat, NOAA NESDIS Jim Spann, NASA HPD Mangala Sharma, NSF Geospace

Extent to which the APL SpaceWx gap analysis relied on GDC
 Paul O'Brien, Aerospace Corp.

• How GDC affects the Space Wx Enterprise overall

Dan Baker, CU/LASP

4:00 PM Roundtable Discussion

(50-minute discussion session)

4:50 PM Open Discussion (any topic)

5:30 PM **Adjourn for the day**

FRIDAY, JUNE 2, 2023

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: https://vimeo.com/event/3458312

8:00 AM Breakfast is available in the room

9:00 AM **Welcome and Introductions** Geoff Crowley, Committee Co-Chair

Sarah Gibson, Committee Co-Chair

9:15 AM Ground-based Networks: Part 1

(54-minute listening session)

Report from RT Subgroup

Jenn Gannon, CPI

• Discussion: SWAG Chapter 3 Recommendations Jenn Gannon, CPI

• NOAA Experience/ideas for Ground based data Networks

Mike Farrar, NOAA NCEP

10:05 AM Roundtable Discussion

(40-minute discussion session)

10:45 AM Break

(10-minutes)

11:00 AM Ground-based Networks: Part II

(40-minute listening session)

Coordination of distributed efforts into Networks

Mark Engebretson, Augsburg University

• Sustainability of ground-based networks/transition to operations

Asti Bhatt, SRI Mike Hartinger, Space Science Inst. Anthea Coster, MIT

• Lessons from Geodetic and Seismic Networks

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Cross-entity Coordination

Eric Donovan, Univ. of Calgary

11:40 AM Roundtable Discussion

(50-minute discussion session)

12:30 PM Open Session Meeting Adjourns – Committee Reconvenes in Closed Session for Working Lunch

The following information is provided for any members of the general public who may be in attendance:

This meeting is being held to gather information to help the committee in its charge. This committee will examine the information and material obtained during this, and other public meetings, in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn nor will recommendations be made. Observers who draw conclusions about the committee's work based on this meeting's discussions will be doing so prematurely.

Furthermore, individual committee members often engage in discussion and questioning for the specific purpose of probing an issue and sharpening an argument. The comments of any given committee member may not necessarily reflect the position he or she may actually hold on the subject under discussion, to say nothing of that person's future position as it may evolve in the course of the project. Any inference about an individual's position are therefore also premature. If you would like to join the meeting in-person, please contact the staff officer listed on the Committee website to arrange attendance and further details.

NOTES FOR PRESENTERS

Your presentation may not include unpublished data, ITAR controlled and/or other sensitive information.

At some point a staff member will be asking you to sign a consent form allowing us to use your presentation, specifically to post it on our website.

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- 2. Click on the URL (below), or open the Zoom app and enter the Meeting ID: (below), and press join. Enter your name if requested.
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Date	Start Time	Туре	Meeting ID	Join Link	
		Open		https://vimeo.com/event/3458312	
June 1, 2023	9:00am EDT	Session			
	Open			https://vimeo.com/event/3458312	
June 2, 2023	09:00am EDT	Session			

STATEMENT OF TASK

The National Academies of Sciences, Engineering, and Medicine will establish the Space Weather Roundtable (referred to in Public Law No. 116-181 as the (Government-University Commercial Roundtable on Space Weather) to facilitate communication and knowledge transfer among Government participants in the Space Weather Operations, Research, and Mitigation (SWORM) Interagency Working Group, the academic community, and the commercial space weather sector. The Space Weather Roundtable will discuss activities that will facilitate advances in space weather forecasting; increase coordination of space weather research-to operations and operations-to-research; and improve preparedness for space weather events. Space Weather Roundtable meetings will engage experts and stakeholders across disciplines and sectors, with a focus initially on those issues identified in the National Space Weather Strategy and Action Plan (NSWSAP) and the Promoting Research and Observations of Space Weather to Improve the Forecasting of Tomorrow Act (the PROSWIFT Act) that would benefit from greater engagement. Examples include space weather benchmarks and scales, communication of risk, steps to improve research to operations and operations to research pathways, commercial space weather data buys, and resilience to severe space weather events.

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