

National Aeronautics and
Space Administration



Space Weather Council Meeting

Jesse Woodroffe

NASA Program Scientist, SWC DFO

August 24, 2022



Today's Agenda

Time	Topic
10:00 AM	Welcome Jesse Woodroffe, NASA Heliophysics, SWC DFO
10:05 AM	Adoption of the Minutes
10:10 AM	Comments from the Heliophysics Advisory Committee Michael Liemohn, HPAC Chair
Topic 1: Space Weather Gap Analyses	
10:30 AM	The JHU Space Weather Science Observation Gap Analysis Angelos Vourlidas, JHU APL
11:00 AM	NAS Workshop on Future SWx Research & Operations Infrastructure Dan Baker, LASP/Univ. of Colorado, Boulder
11:30 PM	Topic 1 Discussion
12:00 PM	Lunch Break

Time	Topic
Topic 2: The Role of the SWC Relative to Other Advisory Bodies	
1:30 PM	Review of National Space Weather Advisory Bodies
1:40 PM	Review and Discussion of the SWC Charter
2:00 PM	The Space Weather Advisory Group (SWAG) Tamara Dickinson and Jennifer Meehan
2:20 PM	The Space Weather Roundtable (SWRT) Sarah Gibson and Geoff Cowley
2:40 AM	Topic 2 Discussion
3:10 PM	Break
Discussion and Comment Period	
3:30 PM	Go-Backs from Topics 1 and 2
3:50 PM	Public Comment Period
4:00 PM	SWC Membership Open Discussion
4:45 PM	Review of Actions and Planning for Next Meeting Jesse Woodroffe, NASA Heliophysics, SWC DFO
4:55 PM	Closing Remarks

Inaugural Space Weather Council Members



Ms Patricia Doherty
Boston College



Dr Daniel Baker
CU/LASP



Dr Michele Cash
NOAA/SWPC



Dr Angelos Vourlidis
JHU/APL



Dr Janet Green
Space Hazards Inc



Dr Valeriy Tenishev
University of Michigan



Dr Alexa Halford
NASA/GSFC



Dr Piyush Mehta
West Virginia University



Dr Ronald Turner
ANSER



Ms Sage Andorka
USSF



Dr Joachim Raeder
UNH



Dr Paul O'Brien
Aerospace Corp.

A decorative graphic on the left side of the slide features a curved, semi-circular shape. Inside this shape, there is a vibrant space scene with a bright yellow sun in the lower left, a large blue and white Earth in the lower right, and several other celestial bodies including a reddish planet, a ringed planet, and a grey moon. The background is filled with stars and colorful nebulae in shades of blue and green.

Adoption of the Minutes

The NASA SWC met for its inaugural meeting on March 10, 2022. The emphasis of this meeting was introduction of the membership, establishment of the SWC purpose, and the provision of information about NASA's Space Weather Program.

The full minutes of the meeting have been reviewed by the SWC membership and the DFO and will be posted to the SWC web site following this meeting.

A large graphic on the left side of the slide depicts a cosmic scene. It features a bright yellow sun in the lower-left, a large blue and white Earth in the lower-right, and several other celestial bodies including a reddish planet, a ringed planet, and a grey moon-like sphere. The background is a vibrant blue and green nebula with numerous white stars. A white curved line separates this graphic from the text on the right.

Comments from HPAC

Dr. Michael Liemohn
University of Michigan
Heliophysics Advisory Committee Chair

A large, stylized graphic on the left side of the slide. It features a curved, semi-circular shape that frames a vibrant space scene. The scene includes a bright yellow sun in the lower left, a large blue and white planet (Earth) at the bottom, a large grey moon in the center, a ringed planet (Saturn) to the left, and a reddish planet (Mars) above it. The background is filled with a colorful nebula in shades of blue, green, and yellow, with numerous white stars scattered throughout.

Topic 1

Space Weather Gap Analyses

Dr. Angelos Vourlidos, JHU/APL
Dr. Daniel Baker, CU/LASP

A large graphic on the left side of the slide depicts a space scene. It features a bright sun in the lower left, a large blue and white planet (Earth) at the bottom, and several other celestial bodies including a ringed planet (Saturn), a reddish planet (Mars), and a grey planet (Moon) in the upper left. The background is a starry field with a blue and green nebula. A white curved line separates the graphic from the text area.

Topic 2

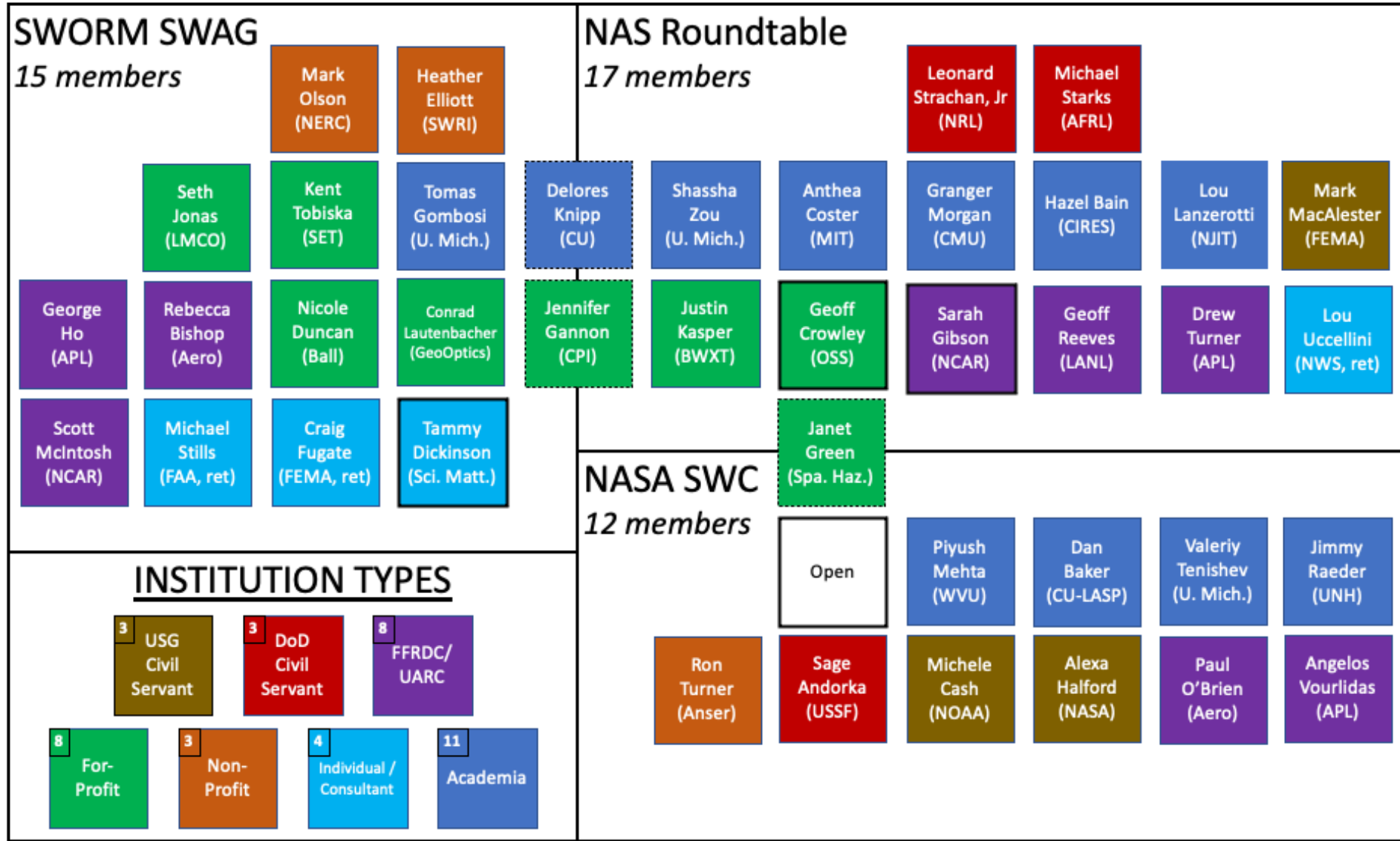
The Role of the SWC Relative to Other Advisory Bodies

Dr. James Spann, NASA Headquarters

Dr. Tamara Dickinson, Science Matters Consulting

Dr. Sarah Gibson, National Center for Atmospheric Research

Dr. Geoff Crowley, Orion Space Solutions



----- A dashed outline indicates membership in multiple groups

▬ A thick solid outline indicates chair or co-chair of a particular group

The Space Weather Council Charter

The Space Weather Council (SWC) is established as a means to secure the counsel of community experts across diverse areas, on matters relevant to space weather in support of the NASA Heliophysics Division (HPD). The SWC serves as a community-based, interdisciplinary forum for soliciting and coordinating community analysis and input and providing advice. It provides advice to the Heliophysics Advisory Committee (HPAC).

The NASA HPD space weather strategic mission is to establish a preeminent space weather capability that supports human and robotic space exploration and meets national, international, and societal needs. This is done by advancing measurement and analysis techniques and expanding knowledge and understanding that improves space weather forecasts and nowcasts. Ultimately, the HPD enables the space weather forecasting capability that the Agency and Nation require, in partnership with NASA's Artemis Program and other Federal agencies, and international partners. This includes the development and launch of missions/instruments that advance our knowledge of space weather and improve its prediction, and the transitioning of technology, tools, models, data, and knowledge from research to operational environments.

The SWC shall be a standing subcommittee of the HPAC. As such, the SWC shall report to and be responsive to actions levied by the HPAC. As appropriate, the SWC may seek scientific and programmatic input from the heliophysics and space weather communities at large on matters relevant to their actions.

Examples of the broad range of activities relevant to space weather that the SWC may be called on to address include the following:

- Articulate key scientific drivers for space weather research including focused research-to-operations-to-research topics, strategic observations, and others;
- Evaluate expected capabilities and rideshare opportunities for achieving HPD goals;
- Evaluate HPD space weather goals and objectives;
- Provide input and advice on relevant HPD space weather activities such as actions drawn from the National Space Weather Strategic and Action Plan, collaboration with other national and international agencies, ground-based observations, and its role in the Artemis and human exploration endeavor.