

Committee on Solar and Space Physics

24-25 October 2017

Co-Chairs: Sarah Gibson and Maura Hagan

Members in Attendance: Steve Battel, Yue Deng, Stephen Fuselier, Todd Hoeksema, Robyn Millan (via WebEx), Tai Phan, Jiong Qiu, Josh Semeter (via WebEx), Howard Singer, Barbara Thompson

Staff: Abigail Sheffer, Sarah Brothers, and Anesia Wilks

Disclaimer: These slides represent a personal assessment of the issues discussed by the CSSP. This document should not be cited or quoted because the views expressed do not necessarily reflect those of CSSP, SSB, or the NRC.

Meeting Overview

Agency Updates

- NASA Heliophysics (Acting Director Peg Luce and Chief Scientist Elsayed Talaat)
- NOAA SWPC (Howard Singer)
- NSF Astronomical Sciences (Richard Green - New Division Director)
- NSF Geospace (Mike Wiltberger - New Section Head)
- OSTP SWORM Activities (Steve Clarke)

Conversation with NASA Associate Administrator Thomas Zurbuchen

Feedback on CSSP Science Centers Report

Planning Discussion for Midterm Decadal Review

Habitability of Extrasolar Planets (Rachel Osten, Space Telescope Science Institute)

Focused Session on Data – report to SSB on Thursday afternoon

Select Highlights of Agency Updates - 1

New NSF Mid-Scale (\$4M-\$100M) Research Initiative – RFI submissions due 8 Dec 2017

Daniel K. Inouye Solar Telescope construction - 78% complete - on time and on budget

NSF Geospace Section removing all program solicitation due dates

- Provides proposers flexibility in submission process

Concurrent hurricane and space weather event during September 2017

- solar flare interfered with HF communications in Puerto Rico for hours during Hurricane Maria
- awareness in OSTP and the White House

Select Highlights of Agency Updates - 2

NASA Heliophysics Division personnel changes

- Steve Clarke on detail to OSTP, Peg Luce is Acting Heliophysics Division Director
- Search for IPA or detailee to fill Heliophysics Division Director underway

NASA HPD thoughts about a way forward in response to concerns about R&A Program

- What can the community and NASA do to **encourage more diversity among mission proposers?**
- What can NASA HPD do to **get the community more engaged in the R&A review** process?
- What **suggestions does the CSSP have regarding the R&A review** process?

Follow-on discussion about diversity challenges with Thomas Zurbuchen

Observations - NASA R&A Program Review Process

- Feedback about best practices is valuable; clarifies need for standardization
- Value of third reviewer
- Insist that panelists prepare, read all proposal summaries at the very least
- Encourage proposers to request a debrief
- Allow proposer to respond to feedback from mail in reviews, before the panel review.
- Current budget environment funding → panel focus on weaknesses, not proposal strengths
 - may reward competitors for taking advantage by drumming up weaknesses
- Inconsistency in experience level of panelists from panel to panel
- Insufficient lead time for panel service invitations

Reflections on Diversity Issues

- Absence of diversity in solar and space physics is a problem that can & should be addressed
- Problem is bigger than solar and space physics
- Issue extends beyond science teams, includes engineering, program management, etc
- Need to make a commitment as a community → current situation is not acceptable
- Be suspicious of easy solutions
- Absence of workplace climate data specific to solar and space physics
- May not be positioned to fix ourselves - engage sociological researchers - bias issues
- Encouragement of leadership experience at right level
- Engage effective role models and mentorship (e.g., Maria Zuber effect in planetary sciences)
- Female pool requirement possibilities → incentives for diversification (e.g., as in industry)
- Provide opportunities to experience what it's like to be part of a mission