

CAA Report

June 10, 2020

Tom Greene & Vicky Kalogera, CAA Co-Chairs

CAA reports to the BPA and the SSB

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

CAA Roles & Responsibilities

- CAA reports to National Academies Board on Physics and Astronomy (BPA) and Space Studies Board (SSB).
- CAA is not the Decadal Survey committee, and it does not set policy for the Survey. It did help the National Academies and the Agencies in preparing for the Survey
- CAA is now focused on implementation of Astro2010 and its midterm assessment and monitoring ongoing agency projects and programs
- CAA also writes short reports as needed
- During the A&A Decadal Survey we have shifted to meetings/telecons “as needed”

Most recent meeting:

March 31 & April 1, 2020; during virtual Space Sciences Week

<https://www.nationalacademies.org/our-work/committee-on-astronomy-and-astrophysics>

CAA Membership (unchanged)

Vassiliki (Vicky) Kalogera (NAS), Co-Chair, Northwestern University

Thomas Greene, Co-Chair, NASA Ames Research Center

Shaul Hanany, University of Minnesota

Lee W. Hartmann, University of Michigan

Elizabeth Hays, NASA Goddard Space Flight Center

Christopher F. McKee (NAS), University of California, Berkeley

Jason Kalirai, Johns Hopkins Applied Physics Laboratory

Jeffrey Kuhn, University of Hawaii

Scott Ransom, National Radio Astronomy Observatory

Kate Scholberg, Duke University

Joseph Silk (NAS), Johns Hopkins University

Alexey Vikhlinin, Harvard-Smithsonian Center for Astrophysics

Alycia Weinberger, Carnegie Department of Terrestrial Magnetism

A. Thomas Young (NAE), Lockheed Martin (Ret.)

Spring CAA Meeting Summary (1)

- Astr. agencies are responding to COVID19 situation well:
 - Ongoing grant solicitation, evaluation, review, administration
 - Space observations continue uninterrupted
 - Ground-based observations largely stopped in late March
 - Observer support has continued uninterrupted
 - Hawaiian observatories restarted in May; Chile and Arizona to hopefully follow in June
- JWST and Rubin Observatory work is ongoing but has slowed. Schedule will be impacted by COVID19
- Astro 2020 Decadal Survey is ongoing
 - Report will be delayed by COVID-19

Impact of Satellite Constellations

- AAS working group (J Hall, J. Parriott) and NRAO (H Liszt) briefed CAA on impact of satellite constellations
 - Serious long-term impacts to visible, IR, radio observations
 - The scientific community is assessing technical issues and possible mitigations (AAS WG, NRAO, Rubin, IAU, ESO, others)
 - Important to coordinate efforts to maximize impact
- CAA wrote a letter to SSB + BPA recommending an Academy report to evaluate / recommend:
 - Environmental protection of the night sky and radio spectrum
 - Document the impact of satellite constellations on astronomy
 - Best practices for satellite operations to minimize impacts
 - Potential regulations and international collaborations
 - Efforts to mitigate science impacts in astronomical data
- Astro2020 also held meetings on the issue; SSB tomorrow

Discussion