2023 NASA Carbon Cycle & Ecosystems Focus Area Joint Science Workshop May 8 - 12, 2023 The Hotel, College Park, MD

For the first time since 2015, the NASA Carbon Cycle & Ecosystems (CCE) Focus Area programs held a *Joint Science Workshop* (JSW) at The Hotel in College Park, MD, from May 8 - 12, 2023. The CCE Focus Area includes four program elements: Land-Cover and Land-Use Change, Ocean Biology and Biogeochemistry, Terrestrial Ecology, and Biological Diversity, which provide knowledge of the interactions of global biogeochemical cycles and terrestrial and aquatic ecosystems with global environmental change and the implications for Earth's climate, productivity, and natural resources. The JSW combined input and community members from these programs and their Applied Sciences counterpart program, Ecological Conservation, which takes research capability built from CCE and develops it into decision making capability for conservation agents and land and water managers.

Over the course of the week, more than 600 people attended both individual program element Science Team Meetings and two days of joint all-CCE plenary sessions addressing five overarching themes: human influence on global ecosystems; climate change impacts; disturbance, resilience, mitigation, and adaptation; research to applications; and future research directions. The agenda also included a meeting of the Marine Biodiversity Observation Network (MBON), a half-day session on NASA data and compute resources, and in-person poster sessions for participants to present their research findings.

In addition to the synthetic, thought-provoking talks during the cross-disciplinary plenary sessions, the audience also learned about NASA-wide activities and initiatives during the Leadership Roundtable that included Julie Robinson (Deputy Director for Earth Science), Lucia Tsaoussi (Deputy Associate Director for Earth Science Research and Analysis), Mike Seablom (Senior Strategist, Earth Science Technology Office), Lawrence Friedl (Director, Applied Sciences Program), and Chelle Gentemann (Program Scientist, Transform to Open Science). Each of the CCE Program Managers also gave overviews of their programs during the JSW, in addition to conducting in-depth meetings for their funded investigators during the individual programmatic Team Meetings.

Overall, the meeting was a tremendous success, with participants spanning five Earth Science Division program elements. Additionally, 350 registrants categorized themselves as early career, with 4 undergraduate students, 110 graduate students, 70 post-docs, and 166 participants <10 years post terminal degree. Early career attendees contributed more than 75% of the posters presented. The post-meeting survey revealed that many participants are interested in possible cross-program collaborations and are excited about the possibility of future JSWs on a more frequent basis.



NASA Leadership Round Table - May 10, 2023



JSW Plenary Session, Day Two - May 11, 2023