

## Join us for our AEOIP 2023-2024 Webinar Series.

On September 3, 2024, from 4:00 pm to 5:00 pm (US Eastern), join Dr. Andrew Feldman, Assistant Research Scientist at NASA Goddard Space Flight Center, for an overview of the Adaptation and Response in Drylands (ARID) framework and opportunities for ARID to address your needs. See below for more details! The AEOIP seeks to foster interagency partnerships to advance Earth Observation-based land management. Our webinar series aims to highlight available Earth Observation missions and data, demonstrate the utility of Earth Observation data to address land

management needs, as well as foster and share successful applications of Earth observations into operational land management decision-making. Learn more about us by visiting our website at: <a href="https://www.aeoip.com/">https://www.aeoip.com/</a>.

## Adaptation and Response in Drylands (ARID): A proposed dryland field campaign

Dryland ecosystems cover 40% of our planet's land surface, support billions of people, and are responding rapidly to climate and land use change. Despite their indispensable ecosystem services and high vulnerability to change, drylands are one of the least understood ecosystem types, partly due to challenges studying their heterogeneous landscapes and misconceptions that drylands are unproductive "wastelands". NASA satellite resources are increasingly available at the higher resolutions needed to enhance understanding of drylands' heterogeneous spatiotemporal dynamics. NASA's Terrestrial Ecology Program solicited proposals for a multi-year field campaign, of which Adaptation and Response in Drylands (ARID) was one of two scoping studies selected.

A primary goal of the scoping study is to gather input from the scientific and data end-user communities on dryland research gaps and data user needs. I'll provide an overview of the ARID framework and focus on opportunities for ARID to address end-user needs. I'll also summarize the team's community engagement and how it has guided development of our framework so far. This includes an ARID kickoff meeting with to gather input from data end-users in the southwestern US, a tribal-engagement focused workshop in New Mexico, and several conference town halls, intensive roundtables, and international engagements. Your feedback would be greatly appreciated.

## **About our Speaker:**



Dr. Andrew Feldman is currently an assistant research scientist in the Biospheric Sciences Laboratory at NASA Goddard Space Flight Center and ESSIC at University of Maryland. His main goal is to understand how climate variability and extremes influence global plant function, and the consequent water and carbon cycle responses. Drylands are a large focus of his work. At NASA, Andrew is a NASA ECOSTRESS science team member and uses high-resolution satellite-based land surface temperature to understand global ecosystem vulnerability. He also co-leads "ARID," which is a scoping study for whether global drylands should be the next NASA Terrestrial Ecology

Program field campaign. Between 2021 and 2023, Andrew was a NASA Postdoctoral Program fellow at NASA GSFC with Ben Poulter. Andrew received his Ph.D. from Massachusetts Institute of Technology in April 2021 and B.S. and M.S. degrees in Civil Engineering from Drexel University in June 2016.