

Congress of the United States
Washington, DC 20515

August 11, 2022

The Honorable Bill Nelson
Administrator
National Aeronautics and Space Administration
300 E. Street, SW
Washington, DC, 20546

Dear Administrator Nelson,

Thank you for your strong commitment to the future of NASA and to ensuring that our nation remains at the forefront of exploration, discovery, and the sciences. Maryland, as you know, has a long and rich history in support of our nation's civil space program. The Goddard Space Flight Center was one of NASA's "founding centers" and is now home to the largest collection of earth scientists in the world. The University of Maryland and NASA have a strong history of joint research activities and mission collaborations in support of space-based science, the earth sciences, and STEM education.

The Global Ecosystem Dynamics Investigation (GEDI), led by University of Maryland in collaboration with Goddard, was competitively selected as a NASA Earth Ventures Instrument (EVI) mission in 2014 and launched in 2018. GEDI is a high-resolution laser that scans and collects data on Earth's forests and topography from the International Space Station (ISS). GEDI quantifies estimates of carbon stored in Earth's vegetation by collecting data from canopy structure which models the horizontal and vertical distribution of above-ground biomass.¹ This data improves scientific understanding of habitat viability for biodiversity and ecosystem resilience and provides critical information for land use management to combat deforestation and the spread of destructive wildfires.² Data collected from the GEDI mission will be used to evaluate and verify international carbon reporting and will help inform climate change mitigation efforts.³ GEDI is an important tool in our global response to climate change.

GEDI completed its two-year Prime Mission in April 2021 and is currently in Extended Operations. In January 2020, ISS changed its orbital altitude which led to reduced resonance and coverage. The ISS reverted to optimal orbital altitude in 2022, but GEDI has been unable to meet its Level 1 science requirements as a result of the prior poor coverage. GEDI is scheduled to be de-orbited in 2023.

¹ Forest Management and Carbon Cycling, GEDI Ecosystem Lidar, Accessed 29 Jun 2022, <https://gedi.umd.edu/applications/forest-management-and-carbon-cycling/>.

² Ibid.

³ Ibid.

The GEDI mission Principal Investigator and members of the scientific community have requested an extension to allow GEDI to complete its data collection and meet its science requirements. We are supportive of this request and ask that you explore potential options to delay GEDI's decommissioning so that the mission may conclude its work.

We would welcome your consideration of this request.

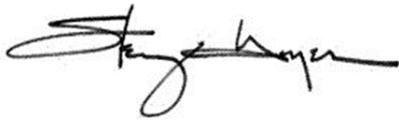
Sincerely,



Chris Van Hollen
United States Senator



Benjamin L. Cardin
United States Senator



Steny H. Hoyer
House Majority Leader